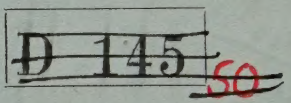
Deptford Public Libraries

CENTRAL LIBRARY

LENDING DEPARTMENT



OPEN from 10.30 a.m. to 8 p.m. each weekday except Wednesday. For revised hours see notices.

This book may be retained for FOURTEEN DAYS, and is due back on the same day of the week as issued. It is requested, however, that, if possible, it will be returned within the time allowed for reading, although the 14 days may not have expired. The time may be extended for a further 14 days on notice being given personally, by post, or by telephone (TIDEWAY 3649) provided that the book is not in demand. Unless extension has been granted, a borrower detaining a book beyond 14 days will be liable to a fine of ONE PENNY for the first week or part of a week and ½d per day subsequently.

Members must protect the books lent to them from soiling and from every other kind of injury, or they will be liable for a sum sufficient to repair or replace the book damaged.

Tickets may be used at any of the Deptford Libraries. Change of address or loss of book or ticket must be notified at the earliest opportunity.

Members at whose house a case of infectious disease has occurred are notified by letter not to apply for books, nor to return those which have been in the house, but to retain them until collected by the Public Health Department.

It is requested that members who can exchange their books during the day will do so rather than wait until the evening.

Any book will be reserved, and the member informed when it is available, on payment of one penny.

Should this book be lost, the finder is earnestly requested to return it at once to the Central Library, Lewisham High Road, S.E. 14.

B 1622

LONDON BOROUGH OF LEWISHAM
LIBRARY SERVICE

Author

Title

BOOK STORE

ooks or discs must be returned on or before the last date stamped on label or on
ard in book pocket. Books or discs can be renewed by telephone, letter or personal
ill unless required by another reader. After library hours use the Ansafone
ervice (01-698 7347). For hours of opening and charges see notices at the
ove branch, but note that all lending departments close at 1 pm on Wednesday

METROPOLITAN
SPECIAL COLLECTION

MAKING OF MAN

THE BOOKS

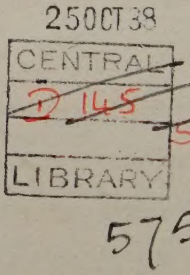
Good-bye for the Present	Eleanor Acland
Worlds Without End	The Astronomer Royal (H. Spencer Jones)
This Torch of Freedom	Stanley Baldwin
Our Inheritance	Stanley Baldwin
A Window in Thrums	J. M. Barrie
Margaret Ogilvy	J. M. Barrie
No Second Spring	Janet Beith
The King's Grace	John Buchan
Montrose	John Buchan
Through Jade Gate and Central Asia	Mildred Cable and Francesca French
Teak Wallah	Reginald Campbell
My Mystery Ships	Vice-Admiral Gordon Campbell
The Leisure of an Egyptian Official	Lord Edward Cecil
The Englishman	W. Macneile Dixon
Great Mother Forest	Attilio Gatti
In Quest of the Sun	Alain Gerbault
A Labrador Doctor	Sir Wilfred Grenfell
The Charm of Birds	Lord Grey of Fallodon
The Vanished Pomps of Yesterday	Lord Frederic Hamilton
The Days Before Yesterday	Lord Frederic Hamilton
Here, There and Everywhere	Lord Frederic Hamilton
Good-bye, Mr. Chips	James Hilton
A Chinese Lady	Lady Hosie
England	Dean Inge
Tibetan Trek	Ronald Kaulback
Making of Man	Sir Oliver Lodge
Essentials of Golf	Abe Mitchell
Fear and Be Slain	Lord Mottistone (General Seely)
Mystic Isles of the South Seas	Frederick O'Brien
For Sinners Only	A. J. Russell
Everest 1933	Hugh Ruttledge
Borzoi	Igor Schwezoff
Gino Watkins	J. M. Scott
Kamet Conquered	F. S. Smythe
The Spirit of the Hills	F. S. Smythe
Over Tyrolese Hills	F. S. Smythe
After Everest	T. Howard Somervell
Endless Story	Taffrail
This Was England	H. A. Vachell

SIR OLIVER LODGE

MAKING OF MAN

HODDER AND STOUGHTON
ST. PAUL'S HOUSE, LONDON, E.C.4

First published 1924
Twelfth edition (First in this form) . 1938



Made and Printed in Great Britain for Hodder & Stoughton Limited
by Wyman & Sons Limited, London, Reading and Fakenham

TO THE

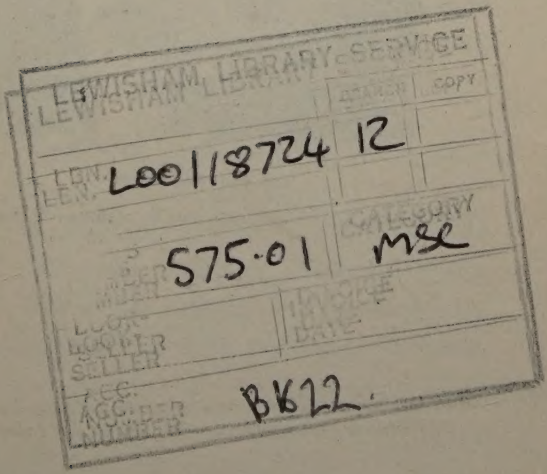
MEMORY OF MY FRIEND

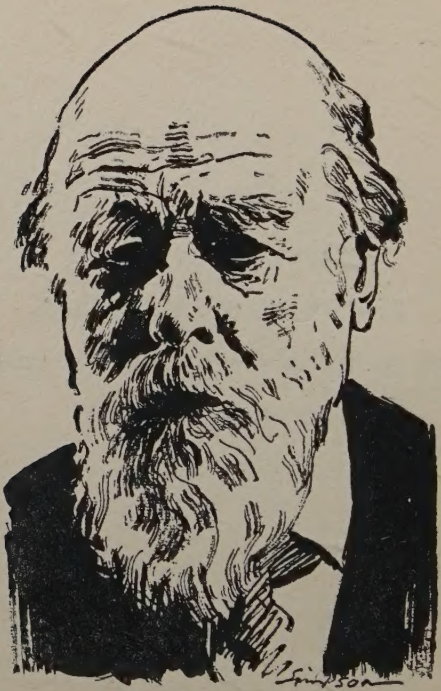
FREDERIC W. H. MYERS

AND OF MY SON RAYMOND, HIS PUPIL,

WITH GRATITUDE FOR

THEIR HELP


LEWISHAM LIBRARY SERVICE
LEWISHAM
COPY
L001187241 2
575.01 MSE
BK22



SIR OLIVER LODGE

Specially drawn by Joseph Simpson from the photograph by Howard Cosier

PREFACE

THE HISTORY OF THE COMING OF MAN IS A LONG story, of which the biological record embedded in the rocks contains only fragmentary hints. These require a biologist to decipher, and no attempt is made in this book to enter into details. The steps are assumed, and the long course of evolution is appealed to. The process is not even yet complete; it is still going on, though we have already attained some premonition of what will actually be the result.

In this book the attempt is made to point out the difficulty of the process and the effort required to construct a creature who will go right of his own volition, without being coerced. Life is here thought of as something *sui generis* associated with the ether of space,

which can interact with matter under certain conditions but which is not inherent to the material frame and endures when that is destroyed.

I call attention to what is said about inertia and reaction, for that is fundamental and is seldom clearly understood. Every word in Chapter Two is important, and has been carefully considered. And so the argument proceeds by careful stages up to Chapters Seven, Eight and Nine, where some indication is given of the heights to which man can rise. I commend this book as a stage in my philosophy, and am very glad it is now going to appear in a new black-jacket cheap edition.

OLIVER LODGE

15*th December*, 1937.

CONTENTS

CHAPTER		PAGE
I.	OUTLOOK ON THE UNIVERSE - A Preliminary Survey of Matter, Ether, Life, and Mind	11
II.	THE EFFORT OF EVOLUTION - - A Contribution to the Problem of Evil	42
III.	THE COMING OF MAN - - -	75
IV.	THE DEVELOPMENT OF MAN - -	94
V.	THE DESTINY OF MAN - - -	109
VI.	THE BEST OF ALL POSSIBLE WORLDS A Concise Summary	126
VII.	THE LOVE OF THE WORLD - -	136
VIII.	MAN'S ASCENT - - - - The First Man and the Second	153
IX.	"TRANSCENDENTAL MAN" - - The Problems of Genius and of Christology	169

PUBLIC
DEPTFORD
LIBRARIES

CHAPTER I

OUTLOOK ON THE UNIVERSE

A Preliminary Survey of Existence. Matter, Ether, Life, and Mind

LIVING AS WE DO ON ONE OF THE SMALLER planets, revolving about one of a myriad of stars, and endowed as we are with sense-organs gradually evolved from animals for purposes of pursuit of prey and escape from enemies, we know well that we are a small and perhaps comparatively insignificant part of the Universe; which, when we are able in occasional moods to realise its majesty, is—to such understanding as we have been able to form of it—quite overwhelming. Humanity itself is but a recent comer to this planet; and from a higher point of view

shows many signs of immaturity. Throughout its history it has been occupied for the most part with internecine struggles, which have usually been the outcome of personal ambition and national perversity rather than a reasonable and necessary part of the struggle for subsistence. Subsistence would be much more easily attained by co-operation than by even the most successful exercise of the arts of war. Nevertheless, dynastic and other wars are a marked feature of human history: and except for a sporadic outburst of racial genius now and then, it is only within the last few centuries that a serious effort has been made—and even then only by a very few—to understand such portion of the Universe as is open to our contemplation.

Our natural weapons of exploration were not evolved for purposes of scientific discovery or philosophical discussion; but they have been supplemented by artificially constructed instruments, whereby we have

managed to explore the superficial portions of the crust of the earth, and the constitution of other bodies in that region of the Universe which we are able to recognise through our sense of sight. The progress we have made in thus exploring the material aspect of the Universe—the only part which appeals to our sense-organs and our instruments—must be regarded as rather astonishing and impressive. And the interpretation of the observed phenomena by men of superlative mathematical genius occasionally strikes us as almost superhuman.

Moreover, we seem to have developed a power of genuine creation, that is to say of bringing things into existence, such as Poems, and Music, and works of Art generally, which would not otherwise have existed; and which are a real contribution, though perhaps only a small one, to the sum of things.

But in spite of all our discoveries, and all our achievements or creations, we really know and have done very little. And what we

have known and done has been achieved by the genius of the few: the bulk of mankind show evident signs of imperfection and immaturity. For the most part we seem content to live in the midst of quite unnecessary ugliness, and to spend our time in what we can hardly regard otherwise than as a sort of futility. Unless mankind is to develop into something far higher and altogether better than anything attained in the present stage of civilisation, the long course of preparation, the hundreds of millions of years during which this planet has been growing habitable, does not seem worth while. Unless the Universe too is meaningless and futile—which surely is a blasphemous supposition—the outcome of all this long course of preparation must be something beyond our present imaginings. It is no great effort of faith to assume that there is a real value in existence; and that the long course of evolution, with its ups and downs, its advances and regressions, must, as it presses forward

like the rising tide, reach some end or elevation of permanent value. Though indeed the word "end" is out of place, for there is no end. At the same time there might be periodicity of phase; and a certain standard having been reached, there might be a local re-beginning. Cyclical changes and repetitions seem appropriate to material, though not to healthy mental, phenomena. The analogy of the Seasons, and of the growth and destruction of worlds, though the time periods are so different, suggests the possibility of utilising a physical periodicity for moral and spiritual advance.

But there is plenty of sub-permanence in Nature. This planet has already lasted long, in its continued blaze of sunshine, as testified to by the fossils in the rocks; and neither the earth nor the sun shows the least sign of decadence, or any likelihood of coming to a castastrophe for, let us say, twenty or a hundred million years ahead. And who can possibly imagine what progress may be made

in even a fraction of such a period as that? Considering what some men have been, the hope is not unreasonable that the average of mankind may reach their standard in time; while the peaks of the race may press on to something higher still.

Regarded from this point of view, the ugliness and triviality of men are full of hope; for they are signs that we cannot already be what we are intended for. We are still far below the ideal. We are an unfinished article. We are like a building covered with scaffolding and full of raw material. Such a building can be regarded with complacency even by its architect; for with the mind's eye he sees beforehand his completed design, and knows that all this temporary imperfection is a stage through which the structure has to pass. It is in the light of that kind of fuller knowledge that immature efforts can be tolerated. The end in that sense justifies the means. Think of the painful learning of a violin by a child;

yet how else is the finished performer to be produced? Looking at the stage at which humanity has so far arrived, in the light of the æons of preparation, the lowliness of human origin, and its vast almost limitless future, we seem driven to believe that the ultimate destiny of man—man as a race—will be something extraordinarily magnificent.

And what are we to say for man as an individual? Are we to suppose, because he is at present weak and ineffective, that therefore he is of no value; that he can be scrapped and turned down into oblivion as though he had never been? Are we to think that evolution is only concerned with the race, and has no permanent interest in individuals? Although it may be called unreasonable to think so, yet that is a mode of thought that has been adopted, now and again, by thinking persons. And it seems a mode of thought which, in certain moods, is likely to return with oppressive frequency and debilitating effect.

A great deal depends upon whether we can regard each individual as an unfinished article. In the infinitude of time, seventy or eighty years is indeed a flash in the pan. And if the individual only endures as long as that, he is very temporary and insignificant. But, as a matter of fact, is he thus evanescent? We do not know the nature of Life and Mind. We see life arriving, we know not whence; and soon departing, we know not whither. Are we to assume that that is the whole of existence, as far as the individual is concerned; or is it but an episode in a far more permanent scheme?

In the physical universe we know that things never start into existence or cease to be; save in the sense that an aggregate or a crowd assembles and then disperses. The crowd has no individual existence; and as a crowd it can come to an end. But that is not so with fundamental existences. They alter, they change, they manifest themselves in different ways; and they may even

cease to manifest themselves and may vanish from obvious ken ; as when a cloud evaporates, or when a sound or other form of energy dies away. We know that really it has not ceased to be ; it has only changed its form. Some things there are which have a beginning, but, to all appearance, need have no end. A poem, or drama, or great work of art, has an immortality of this sort, though its initial material representation may have a very transient life. Whether, for instance, the original manuscript of Beethoven's Fifth Symphony survives, I do not know ; nor does it matter. Such things, once born, never die. They were not : they are : and they continue. When that brilliant genius, W. K. Clifford, composed his epitaph " I was not ; I loved ; I am not " ; he was speculating beyond his knowledge.

The question is then, What about Individuality, Personality ? Is that a fundamental existence, or not ? Is that a mere temporary collocation ; or is there something

real and abiding about it, something permanent? Can it subsist and survive its present embodiment; so that, when it vanishes from our ken, it does not cease to be, but has other modes of manifestation? Does it continue in other surroundings, in a form occasionally accessible to those who have instruments or senses for its appreciation amid the changed conditions? In other words, to put it in concrete form, does the fundamental part of each individual man survive the experience called death?

Now this surely is a straightforward scientific question; and it ought to be capable of being answered. If the individual still exists, he may be able to prove his existence by methods similar to those which he employed when here. How did we know of his existence here? We knew of his bodily frame by seeing or touching it. But the bodily frame is only part of a man. How did we know of his mind, his character, his personality? Surely for the most part by speech and

writing, by holding conversations with him.

If then his personality continues to exist, and if by any means he found himself able to actuate, or employ vicariously, the necessary mechanical organism for operating on the matter of this planet, so as to produce speech or writing, it is reasonable to suppose that by that means he would be able to establish his identity and prove his continued existence. Instruments for the purpose are all around us, complete brain-nerve-muscle mechanisms, though they belong to other individuals. But some of these individuals are known to be able to enter into trance; and, short of that, some parts of their brains are not ordinarily or constantly used, they are sometimes lying more or less dormant, and possibly available for special effort. The utilisation of such brain or part of brain would seem to be the natural channel, if it should turn out to be possible.

It is no use speculating whether such a

thing, or something that seems thus interpretable, is possible or not. We must learn from the facts. All we can say is that if the facts indicate that such a mode of communication is possible, there is no absurdity or *à priori* impossibility which militates against our acceptance of such a fact. It is a straightforward question of experience. We may think it unlikely; but, in the absence of complete knowledge, many true things have seemed at first sight unlikely. We do not know how Mind acts on Matter at all; nor by what means we can produce the movements which we design and determine, even of the simplest kind. But the fact that we can do so is undoubted; and we have grown so accustomed to it that we fail to realise its wonder.

We study the interactions of Ether, Matter, and Energy, with some success; though the Ether eludes our sense-organs, and has to be inferred. The Ether is really involved in nearly every familiar activity, perhaps in

all. It welds the planets together into a solar system; it welds the atoms together into a coherent mass. Its most direct manifestation may lie in the domain of Electricity and Magnetism and Light; for in these, when seriously and critically examined, its activity is manifest. But we know now that electrical forces are responsible for chemical affinity; and we are learning that the ether is responsible also for Cohesion and Gravitation; since not only Magnetism but Gravitation also exerts a direct influence on Light, which is certainly and wholly an etherial phenomenon.

It is only reasonable therefore to ask whether the Ether may not be utilised by Life and Mind; and whether the recognised philosophic difficulty of apprehending the connection between Life, Mind and Matter, is not due to our habit of excluding the Ether from consideration, because of its elusive and intangible character. It is, however, turning out to be an extremely substantial

entity, of which in all probability electrons, and therefore atoms, are composed; so that the familiar things around us are after all only special and peculiar modifications of the Ether of Space.

The aim of Physics at the present time is to explain all material phenomena in terms of Ether and Motion. Energy and Matter are now beginning to be considered interchangeable. Strictly speaking, Matter is not conserved, nor is Energy. What is conserved is the sum of the two.* Matter is turning out to be one of the forms of energy —a newly-discovered form, discovered largely through the genius of Einstein. Hitherto we have known of energy in many forms, all of which have been interchangeable with each other: mechanical motion, elastic strain, heat, light, sound, and the rest. But now that we know that matter is composed of

* Haeckel of Jena said something like this, years ago, in advance of demonstration. At that time I disagreed with him, and said so; but recent progress has justified his speculation. The assertions of men of genius are often of value; their denials, seldom or never.

positive and negative electric charges, whose mass can be accounted for by their electric fields—which certainly exist in the Ether and represent or display some of its properties—we are beginning to realise that matter is one of the forms which its rotatory or circulating motion, or some other modification as yet unspecified, can take; a form which is not intangible or elusive like the unmodified Ether, but for which we have sense-organs, and with which we are therefore exceedingly, perhaps contemptuously, familiar. And now, in the giant stars, we see some of the energy of atoms converted before our eyes into light and heat. The light we see from them is known to be only the residual or escaping portion of the great turmoil of conversion within. Even in our own Sun the process is going on, though not with the same violence as in the giant stars; and the heat of the Sun, on which we are every day dependent, is but the outcome of the conversion of Matter into Energy.

Hence we can begin to speculate on the probability that herein lies the clue to the association of Life and Mind with Matter, that the connection is not direct but indirect. The instinct of Biologists has always led them to assume that Life and Mind must have some kind of material vehicle; that is to say, some close connection with what we otherwise know of as the material Universe. But the material Universe consists not of Matter alone, but of Light, Electricity, and Ether as well. Biologists have been liable to assume, and many do assume to this day, that the material vehicle must be formed of Matter. And some have even supposed that Life and Mind are functions of Matter. But that is only because they were insufficiently acquainted with the other material existences, of which Matter is only a part. It is, I agree, difficult to suppose that Life and Mind can exist without some sort of body or instrument of manifestation or at least of utilisation; nor can we expect it to operate effectively

without some control of Energy; but there is no need to conjecture any such deprivation. To think of atomic Matter only, leaves us with all manner of unsolved difficulties. In terms of Matter only, we cannot conceive the action of the Sun upon the earth, nor of any other action across space: and it really does not matter whether the space is measured in millions of miles or in millionths of an inch: the puzzle is the same.

The Ether has become an absolute necessity for clearness of thought, even in these familiar directions. We know that the atoms of every object, every stone, every piece of wood, every tree, and every animal, are held together by the cohesive force of Ether. Hence every object consists not only of Matter, but associated with it is a body of Ether too: otherwise the atoms would be disconnected, a mere powder or impalpable dust, the nearest approach to which in our experience is the phenomenon of gases; though these too are not really disconnected,

otherwise the atmosphere would not cling to the earth as it does.

Very well then, let us, without undue presumption, attempt a working hypothesis which is suggested though not enforced by the facts. A working hypothesis is very useful in stringing facts together; if the thread breaks, a better one can be found: it is the pearls that are of value, not the thread. So just as Life is known not to operate directly on the muscles, but indirectly through the nerves and central ganglia*, we may now take a step further, and surmise that it may be operating even on the ganglia through the Ether; and that in all probability Life's direct connection is not with Matter at all, but with its etherial counterpart. We may note that thus, in reality, all Matter is normally moved. Atoms do not come into actual contact, they act on each other

* In a chrysalis I understand that the structure of the larva has disappeared into formless pulp, with the exception of its nervous system; and that this has the power of reconstructing, or rather constructing, the finished insect from the protoplasmic mass.

across space, in mechanism, just as really though not so obviously as they do in Electricity and Magnetism and Light. Moreover, if this omnipresent universal medium exists, it is unlikely that it has not been made use of for purposes of vitality. We see Life taking the opportunity of entering into relation with Matter at every turn. It presses forward into material existence on every heap of rubbish. It seems to utilise every chance, whatever the conditions allow for incarnation.

Surely it will have utilised the Ether also. True it is that until it interacts with ordinary Matter, we shall not know of it. But it may be existing all the time in association with an entity of which we have no direct perception. This is hypothetical: but if the facts ultimately tend to show that a comparatively unknown and supersensuous entity can subserve the needs of Life and Mind, we need not be surprised, or think it impossible. The writers of that book of half a century ago, *The Unseen Universe*, speculated

n this direction : and the tendency of science ever since has gradually been to strengthen that speculation ; until now it is becoming, in a few minds, something more than a bare hypothesis.

That Life and Mind need a material vehicle may be granted to the Biologist : but that vehicle perhaps need not be Matter in any of its familiar forms. It may be something more fundamental than Matter, something of which Matter is only a sensuous modification. Vaguely and indefinitely this has been the view of religious geniuses, from St. Paul downwards : that which they have called " a spiritual body " is turning out likely to be a reality. For we are discovering that our own present bodies, or those parts of them which we can study in the laboratory and examine with a microscope, are but instruments for the operations of a more permanent and refined and supersensuous substance, which interpenetrates them and interacts, so as to produce our familiar

movements and to enable us to communicate with our fellows.

The first indication that such communication was also possible through immaterial channels, was given by the phenomena of Telepathy, the action of mind on mind apart from any material or recognised means of communication. This was a hint capable of enlarged interpretation. But the evidence has not stopped there. It has become more direct and cogent. We learn now that those who have departed this life, and left behind their bodies of Matter, still retain (or at least possess) what they speak of as "bodies," with their memory, character, and personality, uninjured and conserved. We have learnt this by entering into communication with them, by speech and writing, just as we did when they were here. They are not really out of touch with us; nor do they seem to be far removed. We may not be able to form a clear image of their relation to Space and Time: but after all we are beginning

to wonder what our own relation is to these two abstractions, and how far they are modes of thought appropriate to our present conceptions rather than to the ultimate reality of things.

This, however, is not a matter to be dogmatic about. None of our working hypotheses are things to be dogmatic about. We have any amount to learn about things of that kind. What we have learnt already, or what some of us have learnt by direct experience, is that, either through the interaction of Ether and Matter or otherwise, communication is still possible, occasionally and under proper conditions. And a demonstration has been thus given us that memory and affection, and personality generally, are not functions of Matter, but only utilise Matter for communication with those in material surroundings. The grounds for this statement are of the same order as those which would enable a temporary and occasional visitor to this planet to maintain that it

is inhabited by more or less intelligent beings.

It is beginning to seem possible that the conservation of Matter and Energy may have to be supplemented by the conservation of Life and Mind. Anyhow, I feel sure of this; that the Universe is a much completer whole than we had imagined. Every kind of real existence is permanent; and our activities do not cease when we change our instrument. Indeed, it is a question whether we do entirely change our instrument. It is probable that we have been interacting on the Ether all the time, and will continue to do so. Our action on Matter appears to be indirect. We probably act on Ether directly, on Matter indirectly.

But the atomic body which we have constructed, and used so freely here, is an imperfect and temporary instrument; for it is afflicted with all the disabilities of Matter—friction, imperfect elasticity, degeneration and decay. It is never the bare atoms that we are able to use. We can only operate on very

complex molecules, the intricate chemical substance called protoplasm ; and these molecules of protoplasm are in a state of continual flux ; and, like the complex atoms of radio-active substances, are liable to break down. Indeed it may be through their breaking-down that we derive the energy necessary for our activities. But there is no imperfection or breaking down in the Ether. It has no friction, its elasticity is perfect ; and all its other properties, so far as we know them, are perfect too. Hence, on the hypothesis of its utilisation, there seems every chance that when we have got rid of our temporary imperfect instruments, our real existence will be unhampered and perpetual. And through what further stages of development we may pass, we can only guess, or perhaps not even guess. All we can make sure of, by experiment and observation, is direct testimony concerning the transition from this state of things to the next.

Though really the word "next" is

inappropriate. There is no "next" world, save subjectively. The Universe is one: it is not so much a sequence as a co-existence. What we call "the next world" is co-existent and simultaneous with this. And death is, so to speak, a mechanical operation, a setting free of our more permanent and essential body or spiritual instrument from the matter-body—the assemblage of molecules which it has collected, put together, and utilised for a time.

We may not fully understand why we should have had to enter into this relation with Matter—an apparently alien thing which, as all artists know, has to be coerced to represent our ideas, and manipulated to display our conceptions. But evidently the episode of earth-life is of importance; we can surmise that the difficulties we encounter in Matter, the troubles caused by our animal-ancestry, and all the struggle and effort which is here necessary, even for maintenance, have a training and disciplining effect;

strengthening our character, sifting the wheat from the tares, and constituting an experience of the utmost value for the future stages of our development.

So they tell us from "the other side." They tell us that they follow our progress with keen interest, and are always ready to help, when we are willing to receive help: not only ready, but able; though, of course, their powers are limited, and, like us, they can but do the best that is possible under the circumstances.

It is not to be supposed, moreover, that every influence on that side is unmitigatedly good: there may be evil influences too, in fact there are. And if we are willing to open our minds to them, we can experience deterioration, and go backwards intead of forward. The responsibility is ours. We have free-will: we are able to choose. And all the exertions of good people, both on this side and on that, are directed to guide and influence us to choose what is best for our true welfare.

This is commonplace. But I would have the whole thing regarded as commonplace. It ought to be part of common knowledge, the whole of it. Like all human things it has quite a simple aspect: that is why unlearned and comparatively simple people have been able to get hold of it in advance of the scribes. Those eminent men who deny the possibility of continued existence, are forming their opinions on mistaken theory. They deny what we call our facts. They think they are the product of delusion, hallucination, preconception, illusory and vain hopes. Well, it is a question of evidence. They would admit that it is a question of evidence. But they cannot form a working opinion without real and not casual study of the specific phenomena. The few that have studied the facts may differ from my interpretation, and especially from my Ether-working hypothesis. By all means. I am willing to abandon it on good ground shown: I hold it lightly: but the facts I do not hold lightly. Pontifically—if opponents

like to call it so—I assert emphatically that there is evidence for Survival, and that some of the evidence is thoroughly good. It can no more be treated superficially than any other of our scientific experiences. It has to be examined with caution and patience and critical care, but with an open, not a closed mind. Prepossessions and prejudices, hopes and desires in either direction, must be put aside. The study must be entered on with humility, with a certainty that, whatever else is doubtful, our present conceptions of existence do not exhaust the infinitude of things, and with more than a suspicion that our present knowledge of the Universe is such as to leave us with a very inadequate conception of the majesty of existence.

There are signs that some of the prevailing ignorance may be remedied in a generation or two; for the facts are more frequent and accessible and open than ever they were before. It cannot be long now before humanity in general recognises that its view of the

Universe has been unduly restricted, partial, and incomplete; that a wider outlook is even now possible; and that, in the light of that wider outlook, the problems of existence will be better understood and human life assisted to an extraordinary degree.

Evolution itself is a revelation full of hopefulness. It signifies the slow development of being from a lower to a higher state, the gradual unfolding of things of permanent value. All that science has discovered hitherto has emphasised the rationality of the Universe. It would be a strange induction to conclude that in the last resort it would prove irrational, and that all the efforts which had gone to the production of man were to have no permanent result, were to leave behind nothing but the dust and ashes of a dead planet.

Contemplate for a moment the alternatives. Either Humanity is in some sense permanent, or else it is evanescent, and temporary. If it be temporary—if the age

of human achievement lasts a certain number of centuries or millenia and then terminates so completely that all goes on as if it had not been—if no permanent advance or addition to the value of existence is the result of all this labour and sorrow—then the moods of the pessimist are partly justified. For in the majestic pageant of Eternity a few million years more or less are as nothing and mere vanity, like an iridescent bubble which flashes the sunlight and vanishes, if they have no permanent result. The unwholesome attitude of lament over the transitoriness and ineffectiveness of human learning and glory is depicted in "The Archytas Ode" (Hor., C. i. 28). Of the opening lines of this Ode, F. W. H. Myer's poem "Immortality" contains reminiscences :—

> Lo all that age is as a speck of sand
> Lost on the long beach when the tides are free,
> And no man metes it in his hollow hand
> Nor cares to ponder it, how small it be ;
> At ebb it lies forgotten on the land
> And at full tide forgotten in the sea.

The poem of Koheleth also takes a desponding view of human existence; it is a cry for richer immortality, like Horace's Ode, for life more meaningful and free, disguised as a lament or sombre meditation :—

> . . . . the living know that they shall die,
> but the dead know not anything, . . .
> the memory of them is forgotten . . .
> their love, as their hatred and their envy,
> is now perished; neither have they any more
> a portion for ever in any thing that is done
> under the sun. . . .
> Vanity of vanities, saith the Preacher,
> all is vanity.

The problem of evil, and the cognate problems of pain and suffering and sin, have weighed heavily on nascent humanity; but they are intelligible, they fit into other knowledge, they are explicable, if we understand rightly the Effort of Evolution.

CHAPTER II

THE EFFORT OF EVOLUTION

A Contribution to the Problem of Evil

"My Father worketh hitherto, and I work."

THE CONCEPTION OF EVOLUTION NECESSARILY involves the ideas of Time, of Progress, and, in some sort, of Effort. There is nothing static about Evolution; as observed, it conveys the idea of proceeding according to plan, but it also sometimes suggests frustration of plan and temporary or local failure. The plan seems to break down in special cases, and to be open to subsequent amendment. Some individuals seem disappointing. It is obvious that everything is not perfect, though the plan and intention seem so good. All this may be a human illusion; but

undoubtedly the suggestion is a Conflict of Wills. The hostile activity of some kind of antagonist is primarily suggested by the facts. When tares spring up among the wheat it is natural to exclaim: "An enemy hath done this."

Consider the scope and meaning of Evolution. The development of a plant from a seed, the unfolding of a flower from a bud, the conversion of an embryonic into an adult variety, the emergence of an insect from a chrysalis—may be taken as types of rapid evolution. The changes and developments in the history of a planet may be regarded as typical of the slower and more comprehensive type. The history of a star, or of a solar system, seems to offer an illustration of what is going on generally in the Universe—a gradual unfolding of latent possibilities, a formation of complex details from a simpler and more homogeneous beginning, and a general rise in the scale of *value* as time goes on; in spite of local and temporary catastrophes. The history of humanity again

illustrates the same process on the mental and spiritual side; notwithstanding many failures, rebellions, and back-slidings, there is progress on the whole. And it seems probable that the information we thus acquire as to actual occurrences within our ken may be speculatively enlarged in imagination to cover a universal system of growth and development, in regions many of them essentially beyond any knowledge that we possess at present. Man is evidently imperfect and still in process of being made; but it has been conjectured that creation is always a gradual and time-consuming process, that all things yearn toward some appointed or desired end, and that the whole of Existence—what by some is called the Absolute, and by others named God or the garment of God—is in process of continual development through the ages, from the less to the more, from the bad to the good, from the good to the better, from the unconscious to the conscious, from the nascent to the achieved, and from the foreseen to the realised.

How and in what way this can be true is undoubtedly a mystery. And yet to suppose that everything has already attained its nearest approach to perfection is to suppose a dull and placid form of existence, a dead level of uniformity, a dull and uninspiring sequence of happenings. To make existence interesting, there must be something as yet unattained, some kind of struggle and effort, a striving towards something not yet grasped, some as yet unattained goal, even some element of risk, which yet can be conceived of as "worth while." So it has always been, and so it probably always will be; further attaining will be superposed upon the already attained; everything is in process of Becoming; and the greatness of the aim may well justify the long course of preparation, since Time seems to be a necessary condition for its attainment. The whole Creation has been said to be groaning and travailing in pain—the effort of bringing to birth.

The struggle and contest against difficulty

—so familiar to us from our lowly point of view—must surely be a symbol and an allegory of something as yet barely conceivable, which nevertheless is a reality. Great things, in our experience, are never accomplished without effort; and the effort is usually accompanied by some admixture of pain and suffering. So we may reasonably conclude that the bringing to birth of a conscious race of beings possessing free-will —liable to rebellion and hate as well as to docility and love, capable of injurious as well as beneficent activity, free from coercion, and amenable only to influence—the production of such a race cannot be an easy task even to the Almighty.

From our point of view the Absolute Being may well be spoken of as Almighty and Omniscient, in the sense that His powers are infinitely beyond our conception. But to suppose that the attainment of His ends can be achieved without effort, to imagine that everything is easy, to assume that, like the

ancient conception of Jupiter, he can do everything "easily by a nod," is to stultify our sources of information, and to reduce existence below the level of grandeur which even a human being can imagine. Things are not done easily by a nod. Depend upon it the effort and the striving are not imaginary but real, even with Deity.

The kind of exaggerated "prestige" which assumes the contrary is destructive of genuine reverence, and fails to arouse the kind of affection born from some germ of fellow-feeling; for it carelessly abandons all attempt at sympathy and understanding. Such an attitude is derogatory and not exalting to any, even a human, creator. To suppose that Newton elaborated the *Principia,* or that Shakespeare wrote *King Lear,* or that Leonardo painted "The Last Supper," with consummate ease—to imagine that these great works could be thrown off easily, in lazy fashion, without sweat of brain and heart—is not to enhance the value of these

achievements, but to remove from them an essential element on which their real greatness depends. Casual and easy achievements are always comparatively valueless.

It may be said that there are some exceptions; and Coleridge's *Kubla Khan* might be cited as an example. But although it may not be possible to specify precisely what, in any given exceptional case, is the energising factor, depend upon it that even in cases such as that, *something* was fully conscious and working strenuously; although in that instance Coleridge's normal consciousness may have been partly dormant.

So, to step from small things to great—or rather from great things to infinite—we can maintain that the construction and management of a universe containing creatures endowed with freewill, cannot be facile, casual, or void of effort, and that to suppose the contrary is merely disrespectful and unintelligent. True, there need be no *waste* effort, no actual mistakes and withdrawals,

no yielding to temptation, no uncertainty of purpose, such as we mortals are familiar with and are liable to expend energy upon fruitlessly. But since our enlightened experience tells us that nothing really great is accomplished even by the highest genius without effort and labour and sacrifice, and sometimes pain, why should we suppose that experience acquired in the universe leads us astray in deductions about the universe itself. Groaning and travailing, in some form or other, is an inevitable accompaniment of bringing to birth. Yet there is a joy and ultimately a keen sense of satisfaction in achievement. What Isaiah said of the suffering servant may be, as it has been, interpreted in a sense beyond his original intention, and beyond our full understanding: "He shall see of the travail of his soul and shall be satisfied."

There must be a sense in which it is true to say, even of the Ruler of the Universe, that triumph must be laboured for, that vigilance is increasing, that every detail is

scrupulously attended to, that in all the infinite Universe there is nothing overlooked, nothing insignificant or trivial, nothing beneath the notice of the Being we worship. And further, that the effort is strenuous and untiring; or, as it has been poetically expressed, "He watching over Israel slumbers not nor sleeps." Laziness is no attribute of God.

So the question arises: What is the striving *against?* Wherein lies the opposition? Why is effort necessary? What is the antagonising principle? We are faced with the problem of evil.

Good is the natural state of things. There is no problem of good. No one asks why goodness exists—that can be taken for granted—but generation after generation has pondered over the question why evil exists, and what is the meaning of it. The dominating and, as we must hold, ultimately successful principle is one of good. Is there then an equally active though less successful

opposing power of evil? That has been the conception sometimes forced upon human thought—the conception of two antagonising powers at war with each other, every achievement being effected against an active resistance; that is the kind of competitive conception illustrated and typified by war, or by the struggle in the football field, where the end to be accomplished is perfectly easy of attainment were it not for the opposing side.

So has Existence been depicted as a competition, antagonism, or rivalry—the power of God ranged against the power of the Devil; Beings supposed to be not exactly co-equal, but co-eternal, and in continual conflict. In some systems Man is a sort of puppet between these rival Powers. That in an elaborate, rather fanciful, and fully developed form, was the religion initiated by Mani, in or about the third century A.D., and known as Manichæism. It was not exactly a heresy; it was a serious attempt

to found a religion on a par with Catholicism and Neo-platonism, and it survived a long time. It may be surviving now in the East: it must have supplied a felt want. In times of despair this idea of conflict between nearly equal Powers at war with each other still rises to the surface; and the problem of evil confronts us with its perennial glare. But a Manichæistic conception of existence can never have been really satisfying. Even its official supporters must have felt that it could not be the ultimate truth. It is too cursory and superficial an interpretation of experience.

And yet if there is a struggle there must be a struggle against something. Even if there is not an opponent, there must be opposition. One cannot exert force against a thing that is flabby and non-resistant. You cannot strike hard a ball of floating thistledown. There must be an anvil as well as a hammer. Pulling at one end of a cord with nothing at the other end is futile:

such a pull cannot be vehement or energetic. What then is the nature of the opposition ?

We human beings are accustomed to resistance and active opposing forces of various kinds, such as the opposition of other men, or of animals ; but—and this is the instructive part—we also have to encounter a kind of opposition in matter itself. We are constantly up against the obstructiveness of matter in various forms ; even our own bodies are sometimes a burden. But apart from that, has not the sculptor to exert himself in order to carve a statue ? The marble offers no assistance : it has to be coerced by hammer and chisel to yield up portions contrary to his design, and thereby be made to submit to his will. It is itself hard and obstructive and yields only to blows. So opposing forces need not be human or conscious. They *may* be active, but they may equally well be inert. To drive a tunnel through a mountain is a difficult operation, even though there is no enemy on the other side to obstruct our

work. We encounter resistance even where there is no active opposition. If a well-greased railway-truck is standing on a level line, and we try to push it, we know that time and energy must be expended and much force exerted before we can get up speed. If we did not know, we might imagine that there was something pushing against us; but there need be nothing of the sort. The opposition that we feel in such a case is mere inertia, passivity, the very opposite of activity. And the resistance that we encounter is not really resistance, but "reaction." Reaction is its proper name. It is due to inertia, a fundamental property of matter, not yet fully understood in its entirety even by Physicists, and by the general public (we may say) not understood at all. And yet in unformulated fashion it is quite familiar: everyone knows the difference between kicking a full or an empty cask. And herein lies the essence of the discussion: here is the solution of the

problem which gave rise to Manichæism; here lurks the truth which renders any such heresy unnecessary.

To understand the facts fully would need the beginnings of a course of Physics: indeed, to understand them completely would need much more. But a general apprehension is within the compass of everybody. And the first thing is to understand what inertia means, and the difference between Resistance and Reaction.

Inertia is the fundamental property of Matter. Matter has no power of changing its own state, whether of rest or motion, Inertia is very different from laziness, for which term it is sometimes popularly and carelessly used. It is more akin to persistence. It is the essential factor in momentum; the other factor of course being speed. Mr. Gladstone once wrote an article on the epithets for Motion in Homer, selecting and discriminating between a number of them, or showing how the poet had done so. He

pointed out that different words are used when speaking of the projection of a light dart, a heavy javelin, or a thunderous stone. The element of speed is common to all, though in different degrees; and the element of mass, or massiveness, or inertia, is common too, but differs greatly in the various cases; so that the product of inertia and speed might be constant in them all—the product called "momentum." So also in our modern examples, a slow-moving railway-truck may have great momentum, and need considerable force to stop it, doing damage if stopped suddenly. A rifle bullet might have equal momentum, with much less mass, though with far more speed; an excess of one factor compensating a defect of the other; so that again damage is done when it is stopped suddenly. A ball of cotton wool, however reasonably fast it was moving, would have insignificant momentum, and could easily be stopped dead. A projectile without inertia, or with too little inertia,

is ineffective. A golf ball made of cork will not fly far. Made of lead it would fly persistenly if it could be adequately started; but the effort would be too great for a club, or anything short of gunpowder. A modern shell ejected from a cannon with sufficient speed has been known to travel the amazing distance of seventy miles. But in all these cases the flight is limited by the obstruction of the air. In a vacuum there would be no resistance, and the flight would continue, simply because there is nothing to stop it. Here is apparent the element of persistence. The motion persists by reason of inertia, massiveness, mass—the fundamental property of matter—incompetency to change its own state, whether of rest or motion. Given no force acting on a body, it remains at what we call "rest"; that is to say, it shares the motion of the earth—whatever that may be—and so is at rest relatively to us. Put it in motion and take away all resistence, it has no power to stop. It simply goes on, so to

speak for ever, until an opposing force is brought to bear upon it.

But how, living on this planet, can we take away all resistance? Only by overcoming it by an equal force. That is what the engine of the train is for, to overcome the resistance of the air and the rails, at least when the train has attained full speed and is going steadily on a level line. There is then no resultant force acting on it: the propelling and the resisting forces are equal and opposite, and therefore their resultant is zero. The train is moving under no force. It continues to move simply by reason of its own inertia. There is nothing to stop it. So it is with a steamship crossing the Atlantic: the propelling and the resisting forces are equal, and the speed is accordingly steady. It then travels by its own momentum, obeying what is called the First Law of Motion, until it gets near its destination, when the propelling forces are diminished and the resisting forces allowed to get the

upper hand. A similar statement is true of a train: it proceeds steadily under no resultant force until the steam is shut off and the brakes are put on. An unbalanced or resultant force has to act whilst starting and getting up speed, and whilst stopping or slowing down speed; but no resultant force acts as long as the speed is steady.

We have here an example of the persistence of motion in matter, an illustration of its inertia. The material universe is a going concern, and all matter simply goes on moving without being urged; force is required to change the motion, either to quicken it, or to slacken it, or to alter its direction, but no force is needed to keep it moving at a constant speed in a constant direction. The direction of a train is altered by the lateral force of the rails. The direction of a ship is altered by a lateral force on the helm.

These facts are in a sense familiar, and yet the complete aspect of them is not usually regarded or understood. Left to itself, matter

continues to move in a straight line with perfect uniformity; and no change would occur in its motion, under those conditions, to all eternity. It would lead us too far to show that the same thing is true for electricity. An electric current possesses momentum; and the phenomena displayed by it are what we know as magnetism. The familiar fact of permanent unsustained magnetism shows that electricity, too, continues in motion when there is nothing to stop it. The electrical stopping force is analogous to friction in the case of ordinary matter. In all probability the Ether neither encounters nor offers any resistance, and therefore whatever motion Ether possesses is perpetual. But probably also the only kind of motion it possesses has the form of infinitesimal but exceedingly rapid whirls; while locomotion belongs solely to matter.

Examples of the persistent unsupported motion of matter are familiar enough in what are called the heavenly bodies. The

earth pursues its course, the sun travels on its age-long way, for no other reason: and we are travelling with both earth and sun continually at great speed. Why? Not because we are attached to anything, but simply because of our own bodily inertia, our own momentum. This is what happens even in a railway carriage; the train does not push us, except at starting and stopping. We travel ourselves.

It may be said, Surely the earth is pulling us. Yes, but the pressure on our feet is very nearly equal and opposite. It exerts just enough resultant force to make us go round it once a day. Then it may be said, The sun is pulling us; and there is nothing opposed to that. True: so it is, it is pulling us sideways. The pull of the sun is only one twenty-three-millionth of the pull of the earth (and so is little more than the twentieth part of the weight of a grain), but it is uncompensated and therefore able to exert its full effect. That is why our path is not

straight: that is why it is curved in an immense approximate circle, and we travel round the sun once a year. The earth travels too; but we travel independently of it, and would travel just the same if it were abolished. Our bodies are like tiny planets. Every loose pebble is like a tiny planet, feeling the pull of the sun and travelling round him in the appropriate time, but otherwise pursuing its journey through space with the momentum with which it was originally endowed,—we know not how.

These laws are extremely simple; and yet their specification has involved occasional confusion and certainly some lack of clearness. Even great Physicists have slipped at times in expressing them. And matter has had attributed to it a power of resisting changes of motion, except when force was applied. That is a bad mode of specification. For it possesses no such power. It is nonsensical to speak of the power of resisting a non-existent force. Clerk Maxwell

amusingly criticised this mode of statement, calling it the "Manichæan doctrine of the innate depravity of Matter" in that it resisted a force which was not exerted, rebelled against a change of motion to which nothing urged it; as you might say that a cup of tea resists becoming sweet unless you actually put sugar into it. There is no such resistance: it is mere passivity. It does nothing of itself. It is not actively obstructive: it is simply passive. If any change is to be effected—change of any kind—force must be exerted, or something appropriate must be done. The response is exactly proportional to the exertion; law is perfectly obeyed; there is no rebellion. Sugar must be put into the tea, or it will not become sweet; but it responds perfectly when sugar is put in. Force must be exerted on matter, or it will not start or stop, nor curve: it will simply go on. It responds perfectly to force when force is exerted.

Its motion is part of its existence. I

presume it is as sensible to ask why it is existing as why it is moving. To neither question can we answer anything save that we do not know. But there it is. Motion is the characteristic property of matter. All matter is in a state of locomotion. I do not know anything else that is; unless we choose to include such wave motion as light or sound. It may seem an exaggeration to say that matter is always moving through space; but it is strictly true. No one can now consider the earth at rest!

This might indeed be taken as the definition of Matter:—That which moves from place to place. Though doubtless there is a difficulty in defining what is meant by "place." Matter is that which moves through space; though again there is a difficulty in defining what we mean by "space." If space were really empty there would be no means of defining it. If space be full of the medium we call the Ether then there may be some mode of ascertaining

the actual motion of matter through it. But if there is, we have not discovered it. The failure to discover it is not for lack of trying. Many experiments have been made to ascertain how fast matter is moving through ether; but they have all failed. We can get no answer. And some there are who think that we shall never get an answer,—that by the nature of things an answer is impossible. These are the Relativists, and this is the initial foundation of the Einstein philosophy. Meanwhile there are others—I for one—who think that we should not shut the door on experiment because of admitted failure hitherto; but that we should persist until we get an answer, or in some way find that an answer is not speculatively but really impossible. The motion of light had already been admitted as an absolute velocity; and how there can be one absolute velocity without others is a question not yet answered. But to go further in this direction would take us too far

afield into intricacies where we might lose our way.

Return therefore to the simple proposition that matter is inert, not rebellious, even in a sense docile, and yet not docile without effort. It does not resist, but it reacts. It does not change except under the action of force, and in order to experience force it *must* react. It must oppose that force with an equal one : and it is through that reaction that it is influenced. Without reaction there is no possibility of force, and therefore no possibility of change. Reaction is not hostile to change : it is the essential condition which renders change possible. You cannot exert appreciable force on a floating feather : you can on the massive car of a floating balloon. Reverting to the pushing of a truck on a level line, the truck must react to your strong push, or the push would be impossible. Action and reaction are equal and opposite. This is Newton's Third Law of Motion ; his second Law being a

quantitative one that acceleration is exactly proportional to resultant force. The First Law was explained above. The three laws were formulated by Sir Isaac Newton, and are the foundation of Mechanics and Physics. With a little assistance we shall see that they are more than that. They may be regarded as typifying the fundamental principles of the material universe.

Take this Third Law of Motion. It is often misconceived, misapprehended even by engineers and practical men. They say, If the truck pushes back as hard as you push forward, why does it move? There is an elementary confusion of ideas here, which it requires a little clear thought to penetrate, although the facts are really so simple. You push the truck; it pushes you. It feels your force; you feel its reaction. It experiences acceleration, that is, it begins to move faster. You experience obstruction; you are prevented from moving forward freely. You have to move at its rate. The

two forces are equal: you are retarded as much as it is accelerated. There is a perfect balance. But the balance is the essence and outcome of the motion. The truck does not resist the added motion; it does not oppose it in any way: its reaction is a direct consequence of the change of motion. Whenever one body pushes another, the acceleration of the one body is equal to the retardation of the other: there is no gain or loss on the whole. This is sometimes called the Conservation of Momentum. What one body loses, another gains. When a bullet is fired from a rifle, the rifle recoils with momentum equal to the bullet,—or rather to the bullet and powder combined. But the gun is more massive, and therefore recoils more slowly. The momentum, however, is the same. When a horse pulls a cart, the cart reacts upon the horse, pulling him back with equal force. If you feel confused by that, it is because you are thinking that the cart is pulling itself back. Nothing of the kind: that

would be active obstruction. It has no such power: it is inert, passive. It reacts, not on itself, but on the horse. It obstructs the motion of the horse. The horse would be free without it. You would not harness a cart to a racehorse: but then neither would you harness a horse to a cart which required no effort for its propulsion, a cart which did not react. The effort of the horse is needed to overcome the reaction of the cart. If the brake were on, there would be resistance too, and the horse would have an unfair task. So also if some boys were hanging on to the cart and pulling against you, there would be resistance. Or if, say, a mule were harnessed to the back of the cart: the horse and the mule would then be pulling against each other in Manichæistic fashion; and the cart might then be abolished for all the good it was. Though if the horse were the stronger of the two it could still be shifted with a wholly undue amount of effort, not necessitated by the nature of things, but artificially

created by the stupidity of the harnessers,—a type perhaps of two nations at war, not struggling with natural obstacles and the difficulties of nature, but contending in opposite directions against each other. That kind of active opposition is evidently possible in the universe. There may be spirits of evil for all we know. Indeed we know there are (though we hope they are not frequent) from our experience of some human beings. Some of them, though very few, seem to be imbued with a spirit of evil; though most are merely weak creatures, incompetent to carry out their own wishes, ashamed of themselves, seeing the better and doing the worse, not because they really desire the worse but because they are enslaved, diseased, because they have spoilt their own mechanism, and are destroying themselves, like a piece of machinery with grit in the workings or a nail among the cogs.

Apart from active evil, however, apart

from war and competition and endless and futile struggle, a necessity for real effort exists in the very innermost constitution of nature. We know that we cannot achieve things without effort. We know that to move things we must exert force. We know that things are amenable to our will, but only through our muscles. The moving of things is inevitable, whatever we want to do. Even to compose a poem, to play a piece of music, or to paint a picture, we have to move the pen, the fingers, or the brush. The bodily effort may be small, the mental effort great; but unless we move we achieve nothing perceptible, nothing tangible, nothing permanent; our thoughts evaporate in futility. We design, but we do not execute. An engineering work, conceived in a mind has to be translated into action and carried out by navvies. The inertia of matter must be overcome. And the effort required is part of the fundamental nature of things: it is not because of opposition, or active

resistance, but because of passive reaction, whereby we are enabled to exert the force necessary to bring changes about.

They may be good or bad changes; that is another matter. That depends on our will, our personality, our character, our intention. Even if our intention is good, we may make mistakes: but at any rate we make something. It is human to err; let us hope it is Divine to forgive.

I have said that inertia, reaction, the need for effort, is imbedded in the nature of things, is an essential ingredient in the universe. What is that but saying that it is an attribute of the Absolute, that it is a revelation of one aspect of the God-head. In so far as the God-head is limited or restrained at all—it is limited and restrained by its own Nature, not by external and adventitious forces.

And yet limitation and restraint are not the right expressions. The reaction that we have been speaking of is not a restraint. It is a condition for success. Force cannot be

exerted without it. In our mechanical analogy or illustration, nothing can be effected without force, and force cannot be exerted without reaction. So far from a limitation, reaction is an assistance. We need not think of one part of the Deity as opposed to another part: there is a harmonious interaction between the parts. Something is actually accomplished; and the accomplishment is due to the reaction, as well as to the active force which calls it out. Hammer and anvil are both necessary, or the nail cannot be smitten. Spirit and Matter interact; the one active, the other passive; the one designing, planning, executing; the other being moulded, obediently responsive, docile yet passively obstructive, with an obstruction which does not oppose but actually assists the object in view, rendering possible what else could not be managed, namely, an active exertion capable of achieving some far-foreseen and desired end.

This is the only opposition to be encountered in the material or mechanical and

manageable part of the universe. Every other kind of opposition can be accounted for by free will, and is an immediate consequence of that invaluable but rather terrible and fearfully responsible grant. Therein—in that first step above perfect mechanism—lay the germ of Humanity, a germ which is incipiently perceptible at how lowly a stage in the evolution of living creatures! And now that, at the long last, that germ has developed and blossomed into consciousness, we begin to realise that humanity itself is only a stage in the upward progress, and that in our conscious freedom and power of choice we possess a spark of Divinity. The kindling and development of that spark must have been the ultimate aim of the age-long course of laborious evolution. Not a son of man only then lay in the womb of time, but a potential son of God.

CHAPTER III

THE COMING OF MAN

" Let us make men in our image."

OF ULTIMATE ORIGINS SCIENCE KNOWS NOTHING. Its methods enable it to infer with more or less accuracy what *will be* from what *is*; and with somewhat greater confidence to gather information about the past from the present, inferring from what was, at any given epoch, something of what went on before it. But however far we thus go back, there is always and inevitably a time before that: just as there is always a future beyond our utmost mental horizon.

Here and now we find Man in an incipiently civilised state, living with other animals on a certain planet, which we know is revolving round one of the stars and receiving thence

sufficient heat and energy to keep it habitable. But how man arrived is only partially known ; and how the planet arose is known still less. Some have thought that it is one of the fragmentary portions of a vast original rotating cloud, of which the Sun remains as the largest concentrated and most active portion. Others there are, also of great authority, who surmise that a catastrophic encounter with another star tore a fragment out of the Sun, and scattered it abroad to make the planets. That the moon was once budded off the earth, is almost certain ; but how the earth arose, we have still to ascertain. What we can definitely say is that it once was hot, and unable to sustain life in any of the forms that we know of ; and that somehow or other, in manner at present unknown, Life appeared—a mysterious entity with apparently the potentiality of slow and infinite development.

But the very material of the earth has to be accounted for, if we really seek for origin.

We may picture to ourselves electrons combining into atoms, and atoms uniting with each other into the molecules of the ordinary chemical substances we know. We may even go further back and speculate on the formation of electrons out of Ether; but we should be getting out of our depth, and still there would be no absolute beginning. Gaps in our knowledge are frequent at present; but in time they may fill up. There seems no limit to the probing power of man's mind.

Meanwhile there is a recognised gap in his knowledge between the formation of a complex organic molecule and its habitation by actual life. It is as if the compounded atoms had made so intricate a pattern, had formed so elaborate a structure, that it afforded opportunity for the habitation of something new and surprising. Life—whatever Life may be—was able to take hold and utilise the structure provided, utilise it for its own further development. As when a heap of stones or rubbish by the roadside is made

use of by floating germs, and clothes itself in verdure. So it may be that Life, always waiting its opportunity, seized hold of the more complex molecules on the planet, and began to enter into its kingdom.

It was a momentous epoch. Thereafter, the laws of Physics and Chemistry were still absolutely obeyed, but no longer were they the sole laws; no longer were they sufficient. The supplementary laws of Biology began to reign. The vitalised molecules were no longer beaten about by every random force: they began in some dim way to control those forces, to form themselves into cells or communities, to accept one particle and to reject another, to grow towards or away from the light, as if they felt it; and, most remarkable of all, to subdivide, to split into two or into segments, and begin the work of reproduction and indefinite growth. Nor did the early stages of development stop there. Some of the cells broke away from the community, and began to move about on their

own account. And when an amœba cell began to protrude a portion of itself and drag the rest after the advancing portion, spontaneous locomotion was begun, and the infinite development of animal life foreshadowed. No longer was food passively received or rejected: it could be hunted for. And in the adventure of the chase, dangers were encountered, which before long required a sense of pain for protection. Other senses, too, became desirable for pursuit of prey and escape from danger.

All these things arrived. Sensitive spots and feelers began to make life more efficient; presently the organism began to enter into relation with its surroundings, not only on the material side by direct contact, but on the etherial side also. Some one or more of the sensitive spots began to be sensitive to ether vibrations; and organisms possessing sensitive spots such as these were able to feel far ahead, to realise things beyond reach, to sense desirable objects and move towards

them, to sense lurking dangers and avoid them. The power of vision was in its infancy. But the incipient eye, if exposed, was too sensitive to merely mechanical stimulus, it had to be sunk to the bottom of a hollow and protected; and was ultimately provided with a lens to make its vision clearer.

All these things happened; in some sense we might say, miraculously happened. For it is marvellous how low down in the scale of existence something that can be called "an eye" appears. An eye is an organ, not even yet completely understood, whereby the organism entered into relation with the Ether of Space and made use of its vibrations.

Vibrations in the air also might be utilised. And hence a new sense-organ was evolved, of a more mechanical and quite different kind from the eye—the rudiment of what we call "the internal ear." And now the creature was equipped for free and easy life in its aqueous environment; and there it

lived for ages, until it began to get overcrowded, and some enterprising species began to crawl out on to the moist land; gradually changing the instruments it had for extracting oxygen from water for those which were more suitable for dealing with air. In early life it would still live in water, but the adult would be more at home on land.

How this amphibious creature developed into the mammal, and how those early mammals grew gradually more vigorous and splendid, is a long story, of which the magnificent science of Biology is able to teach us the main chapters. It was a slow process, involving millions of years; but it occurred: and its products are plain before our eyes.

We are now in a more familiar region: and the prodigious amount there is to learn about it is obvious. Life, from its lowly beginnings, has blossomed into fierce and violent, but also beneficent, activity. The relentless struggle for existence is mitigated by mother-love, and by the sacrifice of

individuals for the general good. Individuals are not isolated and purely selfish. They care for and protect their young; and they form communities for mutual help and safety. Species differ in this respect: there is immense variety; but already we can sympathetically see, among familiar manifestations of life, the rudiments, the lowly rudiments, of mind, forethought, memory, volition, and affection.

A doubt may be felt as to whether it is fair to attribute anything akin to incipient volition to organisms low down in the scale, like insects: it has been customary to regard the lower animals mainly as automata, stimulated wholly by external motives. But, whatever may be true of *work*, *play* must be allowed to have an element of spontaneity; and anyone who has sympathetically watched a group of flies, playing "tick" round a ceiling pendant, can hardly doubt that they are watching play as spontaneous as that of kittens. It feels absurd to suppose that their orbits are capable of prediction, on a basis of

mechanical force alone, by a superhuman calculator with the powers speculatively attributed to him by Laplace. It is not that they are too intricate, alone: an element of contingency and indeterminateness has already introduced itself into the scheme. In a general way, actions can be predicted from known character, even at the human level, but not infallibly and completely and in full detail. If a Theologian claims—no doubt rightly—that true and absolute Free Will can only be predicated of Deity, then I suggest that the facts indicate a nascent germ of something distantly akin to Deity even in lowly forms of life; and that this nascent germ is perceptible to us, when, by reason of its association with matter, we can apprehend life's intrinsic behaviour.

Out of this marvellous pabulum, this interaction between the vital and the physical, in the light of what has gone on before through so many ages, we may reasonably expect almost anything to arise. The stages

that have been already reached would have seemed quite incredible at an earlier stage. Who, looking at a yeast globule or an amœba, when *they* were the highest forms of life, could have imagined the oak, the eagle, and the lion? And who, looking now at our present stage of human development, can form any conception of what man may ultimately become? We do not know, we cannot tell; we can only foresee a very little way: but we cannot believe that this is the end. Surely it is only a beginning! Man is a recent comer to the planet: he is in the early morning of his time. Every achievement leads to something more. Every advance makes further advance possible.

So it was in the stage at which we have arrived in this discussion. Some of the creatures began to develop an extensive nervous system, making them keener of hearing, clearer of vision, more sensitive to pain and pleasure, and more quickly responsive in muscle. They began to hold themselves

erect and look around them. Their eyes came to the front, where they were most wanted, giving them the great advantage of binocular vision, a sense of solidity or third-dimension even at a distance. Their ears only remained at the side, where they would be most useful: the screening obstruction of the head enabling binaural audition. And the nervous system went on developing, and localising itself, until the rudiments of perception and memory and planning and forethought, which had already existed in incipient traces, began to be formidable and controlling: until the creature became capable of self-determination, and had something of a mind which he could make up and act upon.

The gradual growth, from mere creature comfort, working through long periods of development up to a higher potentiality, is thus depicted by F. W. H. Myers in his poem called "A Cosmic History," in which he rapidly traces the evolution of living creatures

from the dust of the earth, and then the mysterious incoming of Mind :

> And first a glimmering ease they had,
> And creatures bound in dream benign,
> Obscurely sentient, blindly glad,
> Felt the dim lust of shower and shine ;
> Then works the unresting Power, and lo !
> In subtler chain those germs combine,
> Thro' age-long struggle shaping slow
> This trembling Self, this Soul of thine.

Hardly man as yet, but a creature potentially human, came now within the range of actuality. Still, however, would he be ruled mainly by his impulses. Real forethought, and action for the future, could only come gradually. Yet in the important matter of feeding, it came at a fairly early stage. Hunger was a forethought motive. It led to the accumulation of stores for the future ; slight, as when a dog buries a bone ; extensive, as when a bee fills its hive with honey.

Later on, much later perhaps, the growth of the brain enabled the limbs to be supplemented by weapons and tools. Something

beyond mere subsistence began to attract attention. Life became easier. Some sense of beauty and interest was developed. And the rudiments of Art began. Long before anything akin to science could be thought of, the feeling for artistic representation, and some sense of beauty, took root in a few of our earlier ancestors—the peaks of the race at that dim and distant period :— and their surviving works of art, preserved in caves, are still capable of exciting admiration. It was not the average, but the leaders of the race, who wrought those notable representations of co-existent animals : a sign of some little leisure and joy in existence.

Next apparently came a sense of the mystery and wonder of existence, and the realisation that there must be some Power higher than anything that appealed to the senses ; something of which they were afraid, and felt that they must sacrifice to, in the hope that they might be helped and not overwhelmed by the alarming forces around them ; whether those

of earthquake and tempest, or the more insidious ravages of disease.

This strictly human stage of development, the effort of primitive man towards higher things, the beginnings of aspiration and prayer, the hope and longing for a higher state of being, and the cry for help from he knew not what—all this has been depicted in literature ; we know too little about it to describe it scientifically, the language of poetry is best :

Through such fierce hours thy brute forefather won
Thy mounting hope, the adventure of the son :

. . . . .

With hopes half-born, with burning tears unshed,
Bowed low his terrible and lonely head ;
With arms uncouth, with knees that scarce could kneel,
Upraised his speechless ultimate appeal ;—
Ay, and heaven heard, and was with him, and gave
The gift that made him master and not slave ;

. . . . .

And some strange light, past knowing, past control,
Rose in his eyes, and shone, and was a soul.

(F. W. H. Myers.)

And then, either along with or soon after these glimmerings of religious sense, there

must have come to some genius of the race a consciousness of self-control, a feeling that his actions were not dictated purely by outer circumstances; that he had a character, a motive power within, something in his own nature which enabled him to respond to some stimuli and reject others; something in the moral universe akin to the selective action which an early organism had exercised in the choice of food: what may be called a knowledge of good and evil, a realisation of the power of choice, a sense of free-will, a feeling that he was not altogether coerced, that he could look around and decide on his own course, that he could choose the good and eschew the evil—in fact the growth of a conscience, which he could obey or disobey.

When this sense of moral value was achieved, something new entered into the scheme. Hitherto animal life had blossomed into sensation and incipient thought. Now a further stage was begun—only begun—merely an amœba-like mind putting out its processes in

one direction or another, yet really though half-blindly deciding on its path. Thus there arose a self-evolved motive power, which, as it grew, might have infinite consequences. The creature that had risen from the animals had definitely now ascended. Well might he be called "the First Man." He kept all the traces of his animal ancestry; they were the most conspicuous thing about him; but in the innermost part of his being there glimmered a nascent soul, a spark of incipient Deity. And he may well have heard a voice whispering to him, as a sort of temptation, "Ye shall be as gods."

How the rise in the scale of existence is depicted in early literature, and how man succumbed to the temptation which now took a more definite form, are known to all. He had not known temptation or sin before; he had obeyed his nature thoughtlessly, with no feeling of responsibility, with no sense of shame or disobedience to what he felt to be right. The skulking home of a disobedient

dog is derived from the dog's human companionship; and it is a sign and symbol of the shamed feelings of the first man, awaiting punishment for his fall below the standard at which he had now consciously arrived.

But the fact that a creature could thus feel shame, could thus be conscious of disobedience to some higher power, is clear evidence of a rise in the scale of existence. The upward step was unmistakable; mankind tripped over it and fell, but not irremediably. Man was now higher than the animals; he had acquired an infinitely developable Soul, a responsive consciousness, an inarticulate longing after a higher life. At his best, he was groping after something higher than himself, feeling after God if haply he might find Him; and we are in much the same condition now. We are still in early days; we understand of Deity very little, though it is true that we have been profoundly helped. All that is necessary for development has been given us; but the human will is slow to learn, and it cannot

be hurried. Acceptance of our privileges must rest with ourselves. The Universe has been infinitely patient in producing us, in allowing time for our free uncompelled ascent; and patient it will continue still, while we blunder and obstruct and oppose all the agencies that are working for our good. Some there are who return and wallow in their ancestral mud; while others think it safe to cower in their artificially hardened cases, as in a protective shell.

"The shell must break before the bird can fly."
γεννηθῆναι ἄνωθεν.

But while the unemancipated creature is thus cabined, cribbed, confined, what struggles and despairs are his! The poor melodious wretch moans his weakness, repines his straitened lot, and sometimes craves the boon of extinction. Aye, Birth is no easy matter, whether it be physical or mental or spiritual birth; pangs accompany it, and danger; it is as serious and severe as death. Yet, if we knew all, both are full of hope; and all the

long-continued trouble and effort in our present fleshly habitation—so painful to put on, so grievous to discard—shall be but the prelude to something which our faith must assure us was otherwise unattainable.

It is easy to be cynical and super-sensible and worldly, to contemn and curb these aspirations of the human soul; there is a School which teaches that our animal ancestry completely accounts for our nature, that from dust we are and to dust shall we return, that mankind is but a rather higher beast of the field, and that in a short time all his thoughts shall perish and the universe continue as though he had not been:

> But some in yonder city hold, my son,
> That none but Gods could build this house of ours,
> So beautiful, vast, various, so beyond
> All work of man, yet, like all work of man,
> A beauty with defect—till That which knows,
> And is not known, but felt thro' what we feel
> Within ourselves is highest, shall descend
> On this half-deed, and shape it at the last
> According to the Highest in the Highest.

CHAPTER IV

THE DEVELOPMENT OF MAN

"Ye shall be as gods, knowing good and evil."

THERE WILL BE—FOR THERE ALWAYS HAVE been—some who complain that the account given by Science of the Coming of Man, its reading of the record of the rocks, differs completely from the poetic account given by Literature, especially the inspired Poem at the beginning of the Book of Genesis, that is to say the book which attempts to give some notion of the Origin of things. But the discrepancies are more apparent than real. The differences are superficial, not deep-seated. It is true that the two accounts differ considerably in mode of expression. Science detects a Formative Principle acting on the primæval slime. Literature, far more poetically, calls it the Spirit of God brooding upon the face of the

waters. But the essential meaning is the same, the formation of the complex out of the simple, the completion of an elaborated structure out of unpromising raw material.

We see relics of the process going on to-day. It occurs in the chrysalis, and in the early stages of many organisms; its most familiar example is the hen's egg. There we have a protoplasmic mass of food material, which we may liken to undifferentiated primæval stuff: but somewhere imbedded in it is a microscopic speck, a germinal vesicle, the agent or channel of the formative principle, handed down from one generation to another: so that if the whole is kept gently warm, and time enough given —three weeks are sufficient—the whole shall become elaborately organised, with bones and beak and feathers, legs and eyes and beating heart; a complete live animal, formed entirely out of the chaotic substance under the mysterious influence incorporated or incarnate in the guiding and controlling cell. And the thing that emegres shall be alive and

intelligent and active, it shall be able to focus its eyes and adapt its muscles to peck at grain ; it shall live a life suited to its stage of development, and shall be able to transmit the vital principle to innumerable offspring. Here, as it were, we have the process in little, going on before our eyes : but we are so used to it that we fail to realise its wonder.

Some pioneers there are who are finding the same sort of formative principle acting in the psychic laboratory, in ways they do not in the least understand ; they testify to its strangely forming temporary structures, of apparently human appearance, out of a formless protoplasmic slimy secretion. Regarding the mechanism of this process we are in complete ignorance. There must be a vast amount to be discovered about it. Without a clue, the facts are difficult to accept ; but the facts are there, and it is folly to reject them for lack of understanding their theory. Not in that way have the pioneers of science proceeded !

Going back to the Genesis Poem, we find

that by a flash of genius, Light is mentioned very early; that is to say the creation of something is mentioned, some first and fundamental something, called Light, which we may reasonably interpret as standing for what we now understand as the Ether, the substance whose vibrations constitute light, the thing without which light could not exist, the universal substance which unites the worlds and conveys the energy from one to another. It is through light that all our energy arrives, and without it there could be no sort of life on the planet. Without the Ether indeed, as we are beginning to find out, matter itself could not have existed: there could have been no material universe at all.

To imagine that anything like this was in the intention of the writer of the Poem, is of course utterly preposterous. His intention and primitive meaning were of the simplest. He was thinking of light and dark, like a child: his utterances were in no way hampered or incommoded by considerations of

scientific fact. He was not concerned with the proximate causes of things ; he went straight back to the ultimate—the Word, the Logos, the Fiat, of the Eternal. Our own task of scientific exploration lies in the intermediate region, filling the gap between the design and the execution, the conception and the incarnation. Could not even now a modern poet, writing of Wren's design for St. Paul's and the structure as it stands to-day, ignore all the work of the builder, the swarming workmen, all the interesting details of construction, and proceed as if no years of intermediate agencies intervened between planning and accomplishment ?

Surely we are educated enough now to know that ancient documents are not to be taken literally, and their words pressed to illiterate extremes. If we can find a way of interpreting ancient literature in a way intelligible to modern conceptions, we can surely be thankful for modes of expression simpler and more poetic than our own, with the

flavour of antiquity upon them, that come down to us through the mists of archaic languages—which nevertheless to scholars are as decipherable and intelligible as are the records of the rocks. It is wholesome to remember also that we too are or will be "ancients" to some of those who shall come after us: let us hope that some at least of our present-day utterances will be as worthy of appreciative study, and as near to the then more deeply perceived truth of things, as are the utterances of genius among our dim and distant forefathers.

Returning to our chapter of Genesis:—next comes the separation of land and water, the formation of oceanic great reservoirs of primæval life; and then the ordered succession of plant and animal, evolving together from a common source, and gradually rising in the scale, until terrestrial life culminates in Man; a being with potentialities rising above those of the animal kingdom; with a consciousness,

a dim consciousness, of the meaning of existence, a sense of conscious freedom and power of choice, an instinct for self-determination, self-control, the recipient of powers and possibilities which might ultimately raise him to divine heights. Poetry briefly expresses these new, momentous, latent, soaring faculties, by the words, "made in the image of God."

> Hints and previsions of which faculties,
> Are strewn confusedly everywhere about
> The inferior natures; and all lead up higher,
> All shape out dimly the superior race,
> The heir of hopes too fair to turn out false,
> And man appears at last.
>
> (BROWNING, *Paracelsus*.)

But, it will be said, the Genesis record—or at least the second and more materialistic version of man's origin—is that of a state of innocency followed by a fall: while the scientific record shows a rise.

A rise undoubtedly there has been, a rise out of the limitations or restrictions of his animal ancestry. What more natural than that a rise should be followed by a fall?

Man was to be given freedom: he must be free to decide on his own course. Advice, even command, might be given, but not coercion, no undue protection from himself. He must realise his own nature, and pay the penalty for misdoing. In no other way could he rise to the heights of responsible being. The legend therefore represents desirable fruit not as hedged round and guarded by a dragon, as in the corresponding Greek story of the garden of Hesperides; no, it was free and open and accessible, guarded only by a word of command. Man was to acquire the gift of freedom, and to exercise it consciously. He was to know that he could obey or disobey: that he could do right or could do wrong. Freedom could not be only freedom to do right; it must involve freedom to do wrong also. The gift of freedom involved the possibility of sin. And sin followed.

Before man had risen from the animals there was no sin. He was in a state of innocency like them. He had no conception of good

and evil, no idea of choosing between them. He followed his own nature ; as they do. He might be cruel like the tiger, or repulsive like the ape ; but until he had risen to the height of the first authentic fully-developed man, he had no sense of conflict in his members, no sense of sorrow for having done wrong, no determination to work out the ape and tiger, no willingness to suffer and make sacrifice for his sins.

The first authentic Man must have had a sense of some supreme Power, a dim longing after something higher, an attempt to realise his feeling of loftier kinship, and a hope of the friendliness, as well as the might and majesty, of Creation. He must have become conscious also that even in the animal world there were beginnings of better things. The efforts of members of a community to help each other, symbolised in the main by parental love, was evidence that the Universe was good at the heart, and might lead to a desire that evil could be gradually overcome and ousted.

Meanwhile he must have been conscious

of a warring in his members; his efforts towards the right were fitful, his sinking below his aspirations were frequent and painful. No longer could he plead innocency and irresponsibility; the dire gift of freedom had been realised, the striving after self-control had been begun. No longer was his state one of placid peace and happiness, like the animals. No longer was he in Paradise: he was out in the world now to labour and struggle, not only with external nature but with himself. The long struggle *humanam condere gentem* had been begun. But even already a predictive faculty was granted; even so far ahead the hope was already held out to him, that a Deliverer would surely one day be born of the seed of the woman, and that Paradise might in the end be regained.

No, the poetic mode of expression and the scientific record are not so entirely discordant as people have imagined. It is true that the scale of time is different. Science knows that the operations of earth formation took

millions of centuries. Poetry compresses them into a single week. But neither Science nor Poetry knows what "time" is; and neither Science nor Poetry can follow out the process of Evolution or Creation in all its details. We see the result at its different stages; the greater part of the working is still completely hidden.

Our ambition now is to trace out the interlocking of the atoms which accompany the process. But even when we have done that, there is much, very much, for which we cannot account, without postulating a great deal more than the laws of Physics and Chemistry. For look what Man has already become, even in the short space of time since his appearance on the scene! Think of his industry and manifold achievements; the way he has begun to alter the face of the ground, to divert rivers, unite seas, and in general to take control, to exercise his dominion and to make the earth and many of its powers suit his convenience! Has he not delved ancient vegetation from the interior

and learnt to propel mechanism with it; thereby supplementing the power of his muscles a million-fold? His imagination has run riot in the realm of Art, which must be regarded as the oldest of his heaven-born faculties; and comparatively recently he has initiated Science, and has begun to use his few animal senses for the serious study and attempted understanding of all the atomic processes going on around him, and of all the material groupings among which his lot is cast.

But, alas! it must be admitted that the average man has not progressed very far as yet. He has not fashioned ordinary human life into much dignity or beauty; his recent ancestors were cave-dwellers; his older ancestors were tree-dwellers; he himself may be styled a slum-dweller; for the greater part of so-called "civilised" mankind crowd together in mean streets and live in pitiful hovels, in order to form a self-protective and nutritive community; not apparently realising that all food must inevitably come out of

the land, under the energising influences of sunshine: there is no other way. It has to be sorrowfully admitted that the conditions of life for the greater number of mankind are rather depressing. But it must be joyfully granted that their spirit rises superior to their surroundings: and that when the call comes for exceptional heroism, they respond just as freely from the slums as from the palaces. Humanity is far better than one would expect from its superficial aspect and sordid surroundings. Its ancient privileges and high sanctions may be masked and hidden, but they are as real as ever. We can readily understand and make allowance for our present lowly condition; we need never be unduly perturbed and discouraged by it. Signs of higher potencies are never lacking: signs of loftiness are apparent even in mean surroundings: the long labour of preparation of the planet is not to be thrown away. Millions of years before man appeared there were signs of his coming; and still there are signs and indications,

to those whose eyes are opened, of a lofty future for the race, in ways as yet undreamt of.

> . . . Prognostics told
> Man's near approach; so in man's self arise
> August anticipations, symbols, types
> Of a dim splendour ever on before.

To realise the possibilities latent in man, we must attend not to the average or the general body of mankind, but to those geniuses of the race whose achievements stand out as signs and symbols, or portents, of what the average may in time attain. That which has been possible may be possible again. That which has been done by one, may in time be done by many. When one visits a library, one feels overpowered by the industry and minute care and labour which has gone to make it what it is. Picture-galleries, libraries, cathedrals, show what has been so far accomplished. But beyond and above all that industry, we can recall to ourselves higher and more unique achievements, in expressing human emotions, in understanding human

character and actions, in penetrating into the secrets of Nature. It must suffice to cite three typical instances—Beethoven, Shakespeare, Newton—and leave the rest to thought and imagination. Already the Development of man has been prodigious.

But still, looking at the lowly average of mankind, one cannot be satisfied with the achievements of the exceptional, the lofty peaks of the race; we cannot bask in the illumination furnished by a few fitful stars amid the blackness of the sky; the night is not yet dispelled, and we must admit, with Browning's *Paracelsus* as on his death-bed he surveyed his fellows:—

> . . . . man is not Man as yet.
> Nor shall I deem his object served, his end
> Attained, his genuine strength put fairly forth,
> While only here and there a star dispels
> The darkness, here and there a towering mind
> O'erlooks its prostrate fellows: when the host
> Is out at once to the despair of night,
> When all mankind alike is perfected,
> Equal in full-blown powers—then, not till then,
> I say, begins man's general infancy.

CHAPTER V

THE DESTINY OF MAN

" In completed man begins anew a tendency to God."

THE PROGRESS OF HUMANITY SO FAR LEAVES much to be desired. The peaks of the race have been bathed in sunshine, but the valleys are still dark. The average of mankind has not emerged very far above its animal ancestry. Many of the animal instincts remain, and are very strong. The fighting instinct, for instance, is prominent, and has blossomed into irrational forms which inflict untold misery. When fighting was a contest between males, and when conquest was due to individual prowess and bodily strength, there was much that could be said in its favour. War in Homeric times was an affair mainly of heroes, their feats and prowess being the

theme of ballad and song, rousing emulation in youth. And long afterwards, men went to battle in gay clothes, mounted on fine horses, and came into personal contact with the enemy. That is the tradition handed down, and is still not without its influence on ingenuous youth.

But by rational people it is recognised, now, that the fighting instinct has had its day and should cease to be. Its present outcome is senseless and demoralising. Long-range projectiles and high explosives began its degradation. For what dignity or valorous display can there be in keeping oneself as invisible as possible, and digging holes in the earth in which to hide? Courage indeed is necessary to carry on this miserable work, just as bravery is necessary to man submarines. But the destruction accomplished is random, mean, and pitiful. And the end, when calamity occurs, is ignominious.

It would seem now as if it might be regarded as a step in advance to wage war

mainly by machinery, guiding tanks and submarines and aeroplanes from a distance, without human bodies inside, so that they can be laden wholly with high explosive, poison gas, and disease germs. And this is what we shall be coming to if sanity is not recovered. The people at home who make the chemicals and explosives are just as essential as the people at the front; so that broadcast destruction seems logically indicated. Women as well as men must be slaughtered. The wounded must be prevented from recovering, and children must be prevented from growing up. Wholesale butchery and destruction is the most efficient way.

There have been stages in man's history—his religious history forsooth—when this was actually done by a dominant nation, so far as the means at their disposal then permitted. No half measures were taken when a tribe was conquered. Extermination was aimed at, though certainly it was on a small scale compared with the extermination which could

be prosecuted now. They did what they could, however. Their priests authorised and enforced their line of conduct:

> "Now go and smite Amalek, and utterly destroy all that they have, and spare them not; but slay both man and woman, infant and suckling, ox and sheep, camel and ass."

The excuse is made that the nations round were sunk in idolatry and evil practices; and that missionary enterprise would have been too dangerous for the still half-enslaved missionaries of Jehovah. But at least the cattle were innocent and harmless. It is no use making virtuous excuses for such conduct, they were utterly mistaken. The only explanation is that they were in an early stage of civilisation. Cruelty and blood-thirstiness is appropriate to savages; and their Theology was not high enough to guide them aright. Massacre is not fighting, and it is massacre towards which humanity is

now again tending. Mutual extermination may be the destiny of man, if he wills it so. It is for mankind to decide. He can be guided, if he is willing, but the Higher Powers will not compel him. He has been allowed to be cruel and ruthless in the past; he may deceive himself into such courses still.

But what a wretched outcome all this is of the original fighting instinct! The original wholesome animal instinct is not responsible for all this. Along this line, and along many other lines if we follow them out, original instinct has been prostituted and degraded by the apparent advance in civilisation. Every advance in knowledge and power can be prostituted to vile ends. Books and pictures can be bad as well as good; and inventive genius can improve our methods of destruction. The conditions have grown so fearful in prospect that there must surely be a revolt against them. Happiness is not so superabundant on this planet that we can afford to spend our energies in damaging

and hurting each other. The evil that we have been speaking of is not really the outcome of our animal ancestry. It is a disease of civilisation, a mania which has accompanied material progress. It is a devil that must be cast out.

But it is an instructive and warning lesson. It is a sign that as we go on advancing we shall be liable to these disproportionate and one-sided developments. We shall have to be on our guard against them. Hitherto we have only been taught to be on our guard against the remains of animal instincts. Material progress has been hailed as if that at least were free from dangers. Its dangers are by far the more insidious of the two. So far as natural sins and temptations are concerned, the lowly origin of man is full of hope. We can realise how they have come about: we see in them nothing unnatural. And we can even rejoice that on the whole we have progressed, so far as we have progressed towards overcoming them, in the

short time during which we have been conscious of sin and imperfection, and have realised that our will was free to determine and to ask help for better things.

For man now knows that though related to the animals on his bodily side, he is related to quite other Beings on his mental and spiritual side. He has developed a religious sense which teaches him that he is actually in touch with a higher order of Creation, that he can have intercourse with it, that he can derive thence help and comfort; that he is not isolated or stranded, nor temporary and evanescent, but that he has within him the seed of Immortality; that on the spiritual side his roots go down to infinite depths, and that he may blossom into regions supernal. It is not truly scientific to ignore this instinct, or any other psychological fact.

Related to the earth on one side of his being, related to the Heavens on another;—a revelation has been vouchsafed to him which raises him far above his present

condition. What he has so far attained is as nothing to the hope held out to him. Already in his higher moments he is conscious that he is the heir of all the ages, the container of infinite possibilities, and that the mustard-seed germ of the Kingdom of Heaven is actually within him.

The history of Earth shows that, for nothing less than a million of centuries,

> . . . . all tended to mankind,
> And, man produced, all has its end thus far:
> But in completed man begins anew
> A tendency to God.

The science of Biology in its narrower sense knows, officially, nothing of this last development. It is concerned mainly with animal and vegetable forms of existence. But there is a human biology as well, which need not be limited to folk-lore: much of it is contained, not in works of science so called, but in works of imagination, in Drama, in Poetry, in History, and in Literature generally. A natural history of man is to be found in

novels; for they are studies of how human beings behave under a great variety of circumstances; and their writers are free to apply all manner of motives, and work out the reaction of human characters to those motives. Without the aid of imaginative writers, few of us would know as much about our fellows as we do. Through them we gain an enlarged experience of life. And it is quite natural and legitimate to appeal to the characters of a great writer, as containing information about the way that human beings behave. They are a sort of text-book of the theory of humanity. Hamlet, Macbeth, Othello, are as living as Plato, Cæsar, and Napoleon. And the minor characters of fiction, up to their level and measure, are alive too. The Formative Spirit can make conceptions which need not necessarily be incarnate in flesh: they are none the less real for that. A great idea may have many more ways of germinating than those we know of now.

The gap between the highest and lowest man is immense. But the Universe must certainly contain Beings far higher than man. From the beginning this has been suspected. And now, in the light of a supreme revelation, man has begun to realise not only the existence of, but his kinship with, Higher Beings. He is aware of an atmosphere of friendliness, which gives him confidence and strength. He has been assured of help and sympathy and comfort from Beings far more powerful than himself; and he feels that ultimately he may be at home in regions far above even the world of beauty which has so far appealed to his bodily senses. He is beginning to learn that he has a continuous existence, apart from the matter of this planet; that the portion of consciousness now actuating and made manifest in his brain is but a small part of the whole; that in his total personality there is a great element of the subconscious and the superconscious, to which some of the geniuses of the race have had

access, and which may become more and more accessible as either the race or the individual advances along its line of destiny.

What then is the Destiny of man? Of man as an individual, and of man as a race.

The individual is the simpler of the two, for much of his fate is manifestly in his own hands. He has the option of degradation, if that is what he chooses; and there seems no limit to the abysses to which it may lead. On the other hand, he has the power to ask for help, to strive upward, to seek after something lofty and inaccessible.

> Like plants in mines which never saw the sun,
> But dream of him, and guess where he may be,
> And do their best to climb and get to him.

By such means, through strenuous effort, in the long course of development, he may rise to heights unspeakable and full of glory.

> . . . "for I am persuaded that the sufferings of this present time are not worthy to be compared with the glory that shall be revealed."

Through service, and maybe voluntary suffering, our path will lie ; we shall not escape into a smooth, demoralising, too-easy existence :

Say, could aught else content thee ? which were best,
After so brief a battle an endless rest,
Or the ancient conflict rather to renew,
By the old deeds strengthened mightier deeds to do,
Till all thou art, nay, all thou hast dreamed to be
Proves thy mere root or embryon germ of thee.
(F. W. H. MYERS, *Renewal of Youth.*)

And how will it be with the race ? Will men be mad enough to compete in devices for scientific mutual extermination ? Or will they cease this conflict with each other, and concentrate on battling with the powers of evil, the pain and disease and poverty and misery that lie ready to entrap them, but which they can master and dominate if they choose ? Existence should be beautiful. The ordered intricacy of inanimate existence, where perfection already reigns, is overwhelmingly beautiful. Animal existence, with its initial germ of freedom, has its weaknesses

and defects, but is undoubtedly beautiful too. Man's existence is an amazing medley of good and evil. Even the body is seldom what it might be. Ugliness is too prominent both in surroundings and in conduct. Pain and sorrow have him by the throat.

> . . . the world is dark with griefs and graves,
> So dark that men cry out against the Heavens.
> Who knows but that the darkness is in man ?
> (TENNYSON, *The Ancient Sage.*)

Why is so much human wrong and suffering permitted by Almighty Power ? Because, in the Creation of man, an exceptionally lofty result was aimed at, the achievement of which was bound to be slow and painful, but which was foreseen as in the long run making all the effort and suffering worth while. A free and noble creature was contemplated, one who was fitted to become a companion of Deity ; a creature who, with all the power of sinning, could yet choose and follow the good, of his own free will ; a creature who was capable of pain and sacrifice

and joy, who could see the higher and could follow it to the utmost, or on the other hand could blind himself to its perception.

> We needs must love the highest when we see it.

But as yet we do not see it: we either do not wish to see, or we only catch the most fleeting glimpses. We are immature, ugly, like an embryo; we are unfinished, incomplete, imperfect, like an unfinished building, covered in scaffolding, full of rough building material; the beauty of the design masked and hidden, the creature unborn as yet, or only in the lowest stage.

> Who knows? or whether this earth-narrow life
> Be yet but yolk, and forming in the shell?

Some day—how long, O Lord, how long!—some day the race will realise the possibilities before it, the powers that can be wielded by mutual help, by the working together of the nations for true co-operation, not wasting their energies on national greed and petty aims. How much already could they not

easily do, forthwith, by merely supplementing each other's deficiencies, contributing each his quota, and pooling all discoveries; as we do now to a great extent in the scientific world!

In our unfinished condition our ultimate destiny is hardly recognisable. Saints and prophets have told us something, or given us hints, but we have not heard. We are too busy with trifles to attend; but some day the veil will be lifted, not only for a few but for the many. Those who have gone before can see now what we are missing. On the further shore they are stretching out hands of help and welcome,

Tendentebantque manus ripæ ulterioris amore.

If we realised the fullness of existence, and all the love and help that awaits us, we should respond, we should overcome our moods of sadness and perplexity, and realise that man-made evils can be overcome by man. We are too often pursuing a vain

shadow and disquieting ourselves in vain, as if under a permanent and dispiriting illusion; but our eyes may be opened to a more vivid sense of reality—

> And we, the poor earth's dying race, and yet
> No phantoms, watching from a phantom shore,
> Await the last and largest sense to make
> The phantom walls of this illusion fade,
> And show us that the world is wholly fair.
>
> (TENNYSON, *The Ancient Sage*.)

Some beginning of realisation of the destiny of the race is not so far ahead as we may think. It needs faith to realise it now; but they "on the other side" tell us that it is coming, is nearing, is at hand. Their estimate of time may differ from ours; but surely another generation will see great changes for the better. We cannot continue in this welter and poverty of soul. We pray "Thy Kingdom come." It is for us to let it come. Let us not look down always, like the man with the muck-rake. That is not what should occupy our thoughts. Human nature is too

good for such petty uses as it is put to. The duty lying to our hand must be done, but not slavishly, pettishly, complainingly. All wholesome work is human service, and may be done with eyes uplifted and a soul set free. Barriers there are at present, too obvious and apparently impassable, but beyond is light and hope :

Look higher, then—perchance—thou mayest—beyond
A hundred ever-rising mountain lines,
And past the range of Night and Shadow—see
The high-heaven dawn of more than mortal day
Strike on the Mount of Vision !
So, farewell.

CHAPTER VI

THE BEST OF ALL POSSIBLE WORLDS

A Concise Summary of the Argument of this Book.

"God saw everything that He had made, and behold it was very good."

THE ROMAN POET ADVISED US TO PRESERVE an equable mind amid adverse circumstances; and Charles Dickens (in his character of Mark Tapley) virtually asked us to feel sympathy and admiration for an irrepressible cheerfulness in spite of obvious misery and disaster. On the other hand Voltaire and many others have poured ridicule upon expressions of irrational satisfaction with a world in which painful and horrible events seem bound to occur. Objection has even been seriously taken to Browning's putting

into the mouth of the workgirl Pippa, when setting off for her annual outing on a fine spring morning, words expressive of her exuberant mood, ending—"God's in His heaven, all's right with the world." Superficially and obviously all is not right. Human actions are, some of them, very wrong; and even human intentions are far removed from perfection. Perfection is manifestly not yet attained, and yet the statement has been made, not carelessly but seriously, that this is the best of all possible worlds.

Can there be any meaning in such a phrase, or is it the outcome of an unreasoning optimism? However it was originally used, it seems to me that "the best of all possible worlds" is a description capable of definition and comprehension, and need not be regarded as absurd. No one looking at the evil and cruelty and abominations which in many parts of the planet are rife—no one can possibly suppose that the earth is perfect or anywhere near perfection; and many have

felt inclined to arraign the Deity for permitting so much evil to exist, or else have ventured to deny that there could be a beneficent Creator at all. Undoubtedly there is much evil, much human sin, and every variety of imperfection. Even the saints have felt smitten with a sense of guilt, and of falling far below their own ideals. How then can it be said that the world is the best possible that could have been made under the circumstances ?

The last three words are important. *Given the conditions,* the world is as good as it could be made—that is the meaning of the phrase at the head of this chapter ; and we must consider what those conditions are.

Assuming, for the sake of argument, an omnipotent God, it is clear that a perfect piece of machinery could have been constructed ; one that would never go wrong, but would execute the behest of its designer with absolute regularity for ever.

Even a man can make mechanism so perfect that it will continue to keep time with

regularity for years and years. There is nothing at all inconceivable about perfection of mechanism; and if the planet were designed and constructed on mechanical lines, then it, too, might have been perfect. So far as it consists of inorganic and lifeless materials it is perfect already; every atom obeys the forces acting on it with absolute precision; there is no trace of rebellion or self-will in inorganic nature.

The difficulty comes in when life and mind have to be taken into account. Directly an element of self-determination or free will is introduced, everything becomes much more complex. If humanity is free, if it be once granted a charter of freedom, it must be free to go wrong as well as to go right. It cannot be coerced. If it be forced to go right, like mechanism, there would be no merit in its actions—nor any sense of responsibility. Beings constructed on mechanical lines might be mechanically perfect, but their perfection would be of a low order. In no sense could

they ever develop into creatures fit for companionship with Deity. They would be lower even than savages possessing the power of self-determination; for there would be no future before them, no possibilities of heroic achievement, nothing to relieve the deadly monotony of mechanical perfection.

The problem of creation was a much higher one than that. We must assume that the scheme involved the gradual creation of a race of free beings endowed with a spark of the divine, a race with a knowledge of good and evil, with a power of choice. Determined in their actions by motives and intentions, truly, but self-determined; not kept in grooves by an alien power, but free to roam over the board, to go through the whole gamut of conduct, to make mistakes, to find out their errors, to perceive for themselves the destructiveness of sin, the merit and safety of virtue, and to choose for themselves the path they ultimately take.

Such a race may go grievously wrong, it

may fall into pathetic blunders, it may commit atrocious crimes, but it has an infinite potentiality before it. It may rise till it becomes as gods; it may fall till it becomes as devils.

The whole power of Deity is impotent to coerce such a race of free beings into anything like perfection. The charter of freedom has been granted and cannot be abrogated. The risk must be run. For better for worse, they must decide their own destiny.

They can be influenced, helped, guided, led—yes; but not pushed, impelled, or forced. Even the Highest can only reach them by example, by precept, by warning, by instruction. The highest of the race may be made use of to instruct and awaken their fellows. All manner of wholesome influences may be rained upon them. But if they will not hear, if they will not mend their own ways, if they will not look up and ask for aid, all those efforts may be wasted and lost upon them.

PUBLIC
DEPTFORD
LIBRARIES

The world is as good as it could be made under those conditions.

But was the risk worth running? It is not for us to judge with anything approaching Divine foresight, and yet we can see that if such a race ultimately does emerge from error, really does set itself along noble paths —if it decides to go right, because of its free choice in that direction, because it willed to do so, and not because it must—then the creation of such a race might be infinitely worth while; for the standard of achievement would ultimately become something higher than we can readily imagine.

It is no great act of faith to assume that to a Vision so far-sighted and patient that it could wait four hundred million years for the appearance of a human race upon this planet, the outcome of a free and responsible race of beings, such as can in the long process of future time be evolved, looms so majestic and lofty that all the sin and suffering, all the tedious stages through

which we now and for many centuries must pass, are more than justified.

This planet can still look forward to millions of years of habitable temperature. The sun shows no sign of fading for another twenty million years; who can say what in that period may not be accomplished?

Moreover, progress is growing constantly more rapid. Man has become a conscious agent in the management of things. Men will already sacrifice all they possess in pursuit of high and unselfish ends; as we have seen in the war.

Hope is in the air, we can co-operate in the Divine plan, we can help and stimulate each other. Weak and erring mortals as we are, yet we feel within us infinite possibilities.

The future lies large and splendid before us, both before the race and before individuals too. The frustrated struggle of our earth life is not for ever. Progress is possible both for the individual and the race, and the ultimate Destiny of Man is so lofty that in

the long last we shall look back upon all this travail, this long effort to bring to birth a truly Divine race, and be satisfied that all the intermediate stages, all its imperfections, its terrible trials and griefs, are stages inevitable toward the attainment of the main result—the attainment of perfection not by compulsion but by free-will.

The present state of the world is but a step in the age-long process. Imperfection is rampant and obvious, yet already we catch more than a glimmering of hope, and perceive that the end and aim are far beyond anything that could have been attained in any other way. The world—desperately imperfect as it now is—is yet the best world that could have so far been constructed. It is an embryo, not a finished product. It is ugly because incomplete. The finished product is far ahead. It is our mission and privilege to help and hasten the process, but it cannot be unduly hurried. Not even God can hasten it beyond what our free will permits.

He can see the ultimate outcome, He can inspire us with some dim vision of it, and so help us on the steep and thorny way to its realisation.

Let no man presume to say that this world is less good than it might have been made. That would be blasphemy. Given the conditions, and the ultimate aim, and the present incompleteness, we may confidently assert that at its present stage the world is the best of all that were possible under the conditions, and subject to the ultimate hope.

In that sense, and in that sense only, this is the best of all possible worlds. In that sense, too, with all its present imperfections and immaturity, it may be worthy of the fostering Love of its Creator.

CHAPTER VII

THE LOVE OF THE WORLD

O happy living things! no tongue
Their beauty might declare:
A spring of love gushed from my heart,
And I blessed them unaware.

THE PHRASE "LOVE OF THE WORLD" IS usually employed with a bad connotation. But the purpose of this chapter is to show that it may be used in such a sense that it is significant of the highest conceptions possible to man. When used in a bad sense, the term "world" signifies something frivolous or paltry, something greedy or acquisitive, or at best something merely sensuous or hedonistic, something on the whole beneath the dignity of true manhood. And this use of the term is frequent even when it is not intended to

imply positive evil, such as is suggested by the phrase "The world, the flesh, and the devil." When children are cautioned against being "worldly," the caution is directed against the temporary, the idle, the luxurious, accessories and incidentals of this present life. But the world, even this planet, contains many things besides those. The beauty of nature, the glory of scenery, the study of bird, beast, and flower; the joy of youthful existence; and all the adaptation and contrivance and enrichment of life amid which our existence is cast,—none of these things can be stigmatised as anything but good, and against the love of these things there is no law. When, according to the old legend, these things were brought into being, God saw that each of them was good. And good they are; and lovable they are; and part of the world they are. Hence humanity is only exercising its right and its privilege, and indeed performing its duty, when, as sometimes happens, it is overwhelmed with love

and affection for the creatures—creatures in the widest sense—which it is able to become cognizant of through its senses.

To feel otherwise is less than human: to feel it in an intense degree has been the privilege of Poet and of Saint. St. Francis of Assisi was imbued with a deep and personal love for all creatures. And it is by intense realisation of the meaning of all this beauty and purposiveness that we begin to rise to heights of the Divine. For, as Browning says in *Paracelsus*: "Where dwells enjoyment there is He." And again Wordsworth:

> Whose dwelling is the light of setting suns,
> And the round ocean and the living air,
> And the blue sky, and in the mind of man.

But there is a larger sense in which the term "world" has frequently been used:—a sense in which it signifies not this planet only, but the universe. Various aspects and portions of the universe are the proper subject of study for men of science; and though the majesty of the universe may

render them dumb, it has given inspired utterance to some of the greatest poets. If the feeling aroused by its life-long contemplation is mainly awe, that is because man can but feel himself a worm in comparison. But if he is able to rise above self-consciousness, to forget himself, and to plunge more deeply into the reality of things, he finds himself suffused with a feeling of worship, of adoration, and of love mingled with the utmost reverence.

For consider for a moment the magnificence of the universe in which we have come into consciousness as sentient beings—magnificent even in respect of power and size. Man's home, the earth, is majestic enough, and can be overwhelming when not in its usual placid mood. Earthquake, Fire, and Tempest, can be overpowering. The mountains and the ocean have kindled an appreciation almost too deep for words; and the splendours of earth, sea, and sky, have been the constant theme of poetry. Nor they

alone. Small things too have been a source of inspiration—witness the Skylark, the Nightingale, the Daffodil—yea "the meanest flower that blows." And if our knowledge were greater, I doubt not that the intricacies of the atom, and the play of molecular forces, could become, and may yet become as popular knowledge increases, the theme of poems beyond those of Lucretius. The study of the smallest insect, or of an earthworm, has led to volumes which, though not poetic in expression, are yet full of appreciation and reverent admiration for these superficially trivial and insignificant things. There is no part of nature which does not reward the explorer. Whether it be great or small, matters little. Everything in the material universe is so admirably fitted to its function, so perfectly serves its purpose, is so inherently beautiful, when closely studied and when the reign of law and order is even partially apprehended, that man is lost in wonder, love and praise.

And shall not the Creator rejoice and love His work? Man of course knows more of his own dwelling-place than of the other planets in the solar system: but all that he has managed to learn about them strengthens him in his conviction that the same laws hold there also, and that amid whatever variety due to different conditions, there can be no doubt that similar beauty and similar adaptation obtains throughout the whole of our family of planets attendant upon the sun.

Without the sun they would be mere lifeless orbs, devoid of activity and desolate. It is the sun which vivifies them on their physical side. It is that which makes life possible as we know it. It is that which brings into existence the wind and the rain and the rivers, the trees and the flowers, the recurring periods of spring and autumn, of summer and winter, of day and night. It is the sun which holds the planets together and welds them into a family. The sun in

fact dominates the solar system, and from a sufficient distance would be the only part of it that is visible. We know that it is one of the stars, the star to which we belong, but differing in no important respect from many of the others. It is at a fearful distance from them; but then they are at the same distance from each other, on the average. They are sown throughout the depths of space, with tremendous intervals between; and there is no reason to deny that the other stars have attendant planets revolving round them, and deriving from them the light and heat which are the essential conditions for activity and incarnate life.

Compared with the earth the sun is gigantic in bulk, a million times bigger—overpoweringly great and magnificent,—everything that we know of in the realm of Physics and Chemistry is there exalted to a prodigious scale; so that through one of the spots which are occasionally just visible to the naked eye

on its surface, the earth would be able to drop, leaving a thousand miles clear all round.

And yet what is the sun compared with some of the stars? Amid the whole group of stars it belongs to the family that we have now learnt to call "the Dwarfs"; in other words, it is a small star—showing how relative the terms "large" and "small" are. We have recently found that there is another class—a class of giant stars, some of which are a million times bigger than the sun, enormously bigger and enormously hotter, with processes going on in them which we are only now just beginning to decipher, operations on which our powers of speculation are active, but concerning which our actual knowledge is at present small,—small but not insignificant, and rapidly growing under the scrutiny and quiet brooding of the splendid astronomers of to-day. Yet these magnificent objects are set at such terrific distances that to us they appear as

only pinpoints of light, incapable of magnification even by the largest telescopes, but bright beyond any brightness that can be produced on earth. What their full meaning can be we do not yet know. But who can doubt that they have a meaning, and that when the purpose of these great orbs is deciphered we shall realise still more vividly the Kingdom and the Power and the Glory, world without end.

Nor are even these the greatest revelations vouchsafed us in the physical universe. Far away in the dim vista of space are other systems, more mysterious, so far away that their light comes to us as a mere fleecy film, having started on its journey at a date before the Pyramids were built, and taken a time which is estimated at thirty or a hundred thousand years. Nor is this likely to be the end. "End is there none to the universe of God. Lo! also there is no beginning."

What does it all mean? What signifies this reign of law and order throughout the furthest depths of space, this intelligible

harmony, so that the physical constitution of even the most distant things can be gradually apprehended by the mind of man? What brought all this magnificence into being? What Power guides and controls it? What Intelligence understands it? What can be the attributes of a Being who sees and plans the purpose of it all? Man can but grovel in the dust and murmur forth his own insignificance.

And yet, should he? Does he not, in the recesses of his being, feel some kinship, some beginning of comprehension, some kind of fellow-feeling with an Originator and Designer, an Artist, a Creator; such as man himself is, in however microscopic a degree? For, though so apparently trivial, he knows that he is not really insignificant. He knows that just as nothing is too great, so nothing is too small for attention. He knows that the path of every atom is regulated as exactly as the path of the greatest sun. He is told that the death of a sparrow is not too trivial,

and parabolically that the very hairs of his head are all numbered. He knows too that he has been given a mind able to apprehend things both small and great. He feels that the power which brought all these things into existence has brought him also; he believes that he has an infinite destiny before him; and he cannot but believe, save in moments of doubt and bewilderment, that the Power which has lavished all that beauty on Creation has thereby demonstrated, not power only, but Love,—the love of a workman for his work, the love of the artist who takes such joy in his creation that he spends time in decorating it, apart from any question of utility. What utility lies in the beauty of a snow mountain or a sunset? Surely such gratuitous and lavish beauty represents the joy of the Eternal!

He prayeth best, who loveth best
All things both great and small;
For the dear God who loveth us,
He made and loveth all.

To the eye of faith this Power is not a mere Life-force, urging things into existence in an impersonal and unconscious manner. So it has been treated; and there is natural justification for the treatment. There *is* an urge into existence; there is a bursting forth of new life, and a utilisation of all available processes for automatic attainment of that object. There is a striving for Life, more Life. And there appears to be also a recognisable progress from the unconscious to the conscious, in the age-long course of evolution.

All these things are true statements, true as far as they go; but they are incomplete. They ignore a further, a higher, truth; they treat the process as blind and purposeless, an unconscious urge, no matter whither; or they are liable to be so understood. But the course of evolution is not blind or unguided; the reasonable character of the result could not be accounted for in that way. There is an evident effort to carry out a design. Strangely, there are signs of

difficulty, of almost frustrated attempts; examples can be cited of species and characters good at the time but subsequently abandoned for something better. There is evidence of mind at work, beneficent and contriving mind, actuated by purpose, a purpose inspired by a far-seeing insight, a deep understanding, an adaptation to conditions. There is clearly a willingness to admit the embryonic, the nascent, the imperfect; but there is also manifested a love and patience adequate to carry the project through, gradually nearer to perfection.

In moments of insight we feel that the Power which made man can truly be said to have made him in His image and after His likeness, and that in man are implanted seeds of the Divine, so that in due course, during ages ahead, his nature can blossom and grow beyond anything which as yet he has the power to conceive. So he need not be overwhelmed by the magnitude and glory of the physical creation; he has a mind and

soul and spirit superior to that, belonging to a different category, one that is noble and dominating and able to understand and feel exhilaration and joy in the splendour and beauty of existence. Yes, more, man can feel himself an intimate and inspired part of it, a part able not only to understand, but to take some conscious share in the work, as he gradually develops and rises in the scale of existence from the animal world towards the Divine. He can be keenly conscious of law and order; and can realise something of the beauty of the whole.

And his own higher attributes—intelligence, and consciousness, and love,—he feels he can attribute to the Source of it all. He knows that the creature cannot excel the Creator in any detail. That which he is conscious of, therefore, exists in the whole, and is a part of the Absolute. The Absolute is no self-centred self-sufficient Being, without friendliness or desire for companionship. He has brought into being, not the worlds

only, but the animate free creatures endowed with power of choice, knowledge of good and evil, freedom to go right or wrong of their own volition; so that in due time—after many struggles and disappointements, after much pain and suffering and evil,—they can rise ultimately to the heights for which they are intended, until they are fitted to be companions of Beings higher than as yet we are able to conceive.

Man, as he is, does not seem worthy of much Divine affection: but that is a short-sighted view. Man as he may be is worthy. And who can deny that even man as he is—groping and struggling and rebelling and sinning,—can yet be regarded with sublime affection by a Being large enough to understand and sympathise, to love and help. The World in the largest sense includes humanity; and the Love of the world includes the Love of man. The Deity is not really isolated from his creatures. He shares with the them pain and the effort, and the

hope of ultimate triumph. All religion in some sort testifies to this. And the greatest mystery of the Christian religion is the recognition, as a positive fact, that God is in close relation with humanity, has entered into the strife and turmoil, has taken our nature upon him, and henceforward now and always is active and energising and suffering and helping, sorrowing and rejoicing and inspiring, and, in spite of all, loving, and willing to undergo sacrifice for the disappointing creature upon whom He has conferred the privileges of existence and freedom.

Love of the world! Yes, God so loved the world that He gave the Being we are taught to call in a special sense His Son, to enter into our nature, to share our troubles, to sympathise with our pain, and to undergo torture and death for our redemption, and thereafter to continue permanently working in our midst and aiding all those that with hearty repentance and true faith turn to

Him. So that henceforth, if only man will seek, and ask, and open his heart to the Divine indwelling, he can be inspired by the very spirit of God, and consciously recognise this ever vital and mysterious Reality, Emmanuel, God with us. For there is no halting-place. The ultimate perfectibility of man's nature has been foreshadowed by nothing less than an influx of the Divine. The coming of primitive man was a great event, but the brooding Spirit did not cease its operations: something more than freedom was to be realised; and in due time a further revelation was given,—a revelation of abiding Interest and of Loving Self-sacrificing Help.

CHAPTER VIII

MAN'S ASCENT

The First Man and the Second.

" The first man is of the earth earthy, the second man is the Lord from heaven."

AT CERTAIN STAGES IN THE LONG HISTORY OF the evolution of this planet, new qualities make their appearances, sometimes without any apparent or obtrusive connection with what has manifested itself before. Sudden changes, and the occurrence of a new phenomenon, are not unknown in nature. A continuity runs through them, of course, but the continuity is often far beneath the surface. To superficial appearance there is a sudden and perhaps inexplicable change; and this change, though possibly insignificant in itself, may have prodigious consequences. A very simple example can be given, in the collision between flint and steel. Nothing in the appearance, or the past history, of these two

things is the least suggestive of a spark. Yet of a sudden a spark is produced ; the functions of a previously latent *Ether* are evoked, for the conveyance of light ; and if conditions are favourable—if tinder and shavings are present —a conflagration of any magnitude may arise.

Or, as another instance, consider a meteorite. A cold dark lump of stone or iron, traversing the depths of space monotonously for thousands of years without adventure of any kind, suddenly encounters the earth's atmosphere—an unexpected and novel obstruction—is rubbed by high-speed friction into a brilliant glow, and is dissipated in fragments of fine dust.

Or, again, take the hypothetical condensation of a planet out of a gaseous mass. During this prodigious event, for the actual occurrence of which the evidence is very strong, there must have been several epochs of cataclysmic novelty, but at some stage or other the conditions were such that water in the liquid form could begin to collect ; and soon thereafter, in all probability, some

low forms of life begun to make their appearance, coming we know not whence. Again something new has come in and interacted: something inert or latent or unknown before.

Then, as living beings developed and rose in the scale of existence, sooner or later, gradually—not suddenly in this case—some element of mind or consciousness began to glimmer; and this consciousness, when further developed, must at some further stage have been seized and formulated, by some early genius of what was destined to be a civilised human race, as a sense of free-will and power of choice—a perception of the difference between good and evil, and of the ability to choose between them. Such an early genius—whether we choose to call him Adam or not—may well be styled "the first man"; for he was the first to rise to the dignity of humanity, the first to realise the sense of responsibility and freedom. That was his contribution to the growing world. That was a rise in the scale of existence never again to be

completely lost, an upward step on which man might rise to higher things and eclipse everything that had been possible to his animal progenitors.

That man should trip over the upward step and fall—that now with full knowledge of what he was doing, and clearly seeing and approving the better, he should sometimes choose the worse, and that thereby conscious sin, a human prerogative, should enter the scheme of planetary existence—all that is lamentable, but was inevitable. The possibility was an immediate consequence of the entry of free will. No longer was man governed by mechanical necessity; no longer was he responsive to simple stimuli without conscious choice; his nature had now attained a higher grade. He stood on a higher level than the rest of the animal world, and in consequence was peculiarly liable to fall. In his degradation he might fall below the beasts of the field, but in the possibilities of upward struggle that were now within his reach, he might rise to unexampled heights.

Those, then, may be taken as examples of the more or less sudden and unexpected changes in the course of animal evolution. First of all the placid course of the phenomena studied as Mechanics, Physics, and Chemistry, was invaded by the appearance of life ;—Life, obedient to Physics and Chemistry, but directing their energy into new channels ;—and organisms suited to the future study of Biology began their career. Then, probably by gradual transition, the bare elements appropriate to Psychology began to make their appearance; and Mind and Instinct, influenced by anticipation of the future as well as by stimuli from present and past, began to dominate both Life and Matter. Then, at length, came the dawn of full consciousness and sense of free will—the power to seek the good, the true, the beautiful, in spite of forceful opposition ;—and "man" began his tumultuous career.

Man was now higher than the animals, he had acquired a Soul, but he was not yet in any respect divine ; nor could he form

any clear conception of the nature of Divinity, His instincts groped after some Power higher than himself, but always as of something outside himself, something which might be a Power, a Tyrant, or even a Friend,—but not a Relation; some Power which he had to regard anthropomorphically for lack of any other manner of conception, but without any insight as to the kind of likeness, without any notion of what might be meant by sonship.

The humanity of man had been attained: the divinity of man needed a further revelation. A first man had come: the advent of the Second Man was awaited. Glimmerings of his coming began to dawn on the specially enlightened. With many mistakes and misapprehensions, prophets began to prepare his way; and, without any clear conception as to the form in which it might arise, some definite revelation was expected—the advent of some messenger or Messiah from God. The first man was of the earth, earthy; the second man was to be the Lord

from Heaven. What had now to be revealed was the potential Divinity of man. Human nature had risen to a stage at which a fresh sudden irruption was possible,—the incoming of something novel and surprising,—and, as at the first, so, in spite of the general low level, the second manifestation occurred. And thereafter, through many backslidings, many failures and denials, the sense of man's potential divinity has never been wholly lost.

Mankind had by long training at length attained a stage at which a human body was competent to serve as the vehicle of an infinitely developable spirit, capable of rising to heights unimaginable,—far beyond the level of present humanity. The consciousness of such power was now conferred as a divine privilege. Mankind was taught, not by precept only but by example, that they were sons of God, heirs of the Kingdom, that the Kingdom of Heaven was within their reach, and might actually be within them.

But to realise this, some sudden change was

necessary. They must accept and enter into the new consciousness; they must be as it were new-born, or born from above. And to the majority of men this would seem impossible, or at any rate not worth striving for. Some of them had barely risen to the heights of the first man. The earth was sufficient, and more than sufficient for most of them. "As is the earthy, such are they also that are earthy: and as is the heavenly, such are they also that are heavenly."

But the leaven had been sown, and thenceforth would spread. The potentiality was there: the acceptance and realisation of it remained to be accomplished as the voluntary contribution of the individual. The teaching was clear that as they had risen in the scale once, so they must rise in the scale again, if they were to be worthy of their opportunities. "As ye have borne (or, rather, reflected) the image of the earthly, so must ye bear the image of the heavenly." "Ye must be born again; born from above": *γεννηθῆναι ἄνωθεν.*

Only so could the innate potential divinity of man be realised; only so could it begin to develop. A new possibility had opened before the human race, a revelation of what man could become. No longer were they in association only or chiefly with the animal world, no longer were they limited to their inheritance of conscious freedom, from the first man. God had come very nigh unto them. Made in His likeness, yes: they had been told that, whatever that might mean. But now more than that. They began to learn that they were endowed with a portion of the Divine Spirit; very faint and fragmentary, not really understood, too faint to be recognised, till One appeared in whom dwelt the fullness of the Godhead bodily, who realised his Sonship in a unique degree, and who told us plainly of the Father.

The potential Divinity of man, the actual Humanity of God,—that was his message; and he lived a life to correspond with his message. He was despised and rejected by

the ecclesiastics, but the common people heard him gladly. Their instinct, as often, was more to be trusted than was learned and sophisticated professionalism. Scribes and Doctors of Divinity were against any fresh revelation; they sought to suppress it. Prophets of a new truth have always been liable to persecution. A new revelation always has to make its way against unbelief and hostility. Is it not so even now?

They slew him. They hoped to exterminate him and his doctrine. But they thereby set free his Spirit from bodily restrictions. Henceforth he could inspire his disciples, not by word of mouth but by indwelling grace. The Holy Spirit, his own Spirit, entered into the willing and the child-like soul. But not unless a welcome was accorded; never did it force an entry against free-will. And thenceforth it was possible to put off the old man and put on the new; any son of man could now rise on stepping-stones of his dead self to higher things.

The Divine Being had come, and not gone. Emancipation from the prison of the flesh had spread His influence broadcast, and only receptivity and faith were henceforth needed for man to realise that he too was, or might be, an heir of the Kingdom, and that a magnificent inheritance lay before him. And still, even now, it must be true that eye hath not seen, nor ear heard, neither hath it entered the heart of man to conceive, the glory that shall be revealed.

This sounds like hyperbole. It may be literally true. Given an entry of Godhead into humanity, and its conscious recognition and acceptance by man, anything may be possible. Who could have anticipated, in the old days of what we call "Adam," all that unregenerate man has done already. The seeds of progress were in him, and are still; though the evolution of his spirit has hardly begun. But he is on the up grade, and with Divine assistance the next two thousand years will witness such a rise in the scale of existence as will dwarf everything

that in the long course of Evolution has so far been accomplished.

The Manner of the coming of the Second Man

It is instructive to realise the contrast between the prophetic anticipations of the Messiah and the conditions of his actual coming. It is true that in inspired moments some (subsequently interpreted) intimation was given that he would be despised and rejected of man, but for the most part the ideas of glory and power and dominance and supremacy saturated the expectations. No one could have expected that the conditions accompanying a Divine Incarnation would be such as they actually were;—obscure and lowly to an extraordinary degree; born not even in the comfort of a country cottage, but after the mother's long tramp from one province to another for purposes of Imperial taxation or registration; so that the place was crowded with travellers, and so that the birth had to take place in a stable for want of any other accommodation: born among

cattle, and so in a sense related to the animal world, as the first man too had been. Then the obscure life of a humble peasant, far from the influences of the capital; a genuinely human life, subject to all the difficulties and restrictions belonging to such surroundings. Hailed by the inspired and the clairvoyant ("Lord, now lettest Thou Thy servant depart in peace, for mine eyes have seen"), but obstructed by the majority, and subject to the risk of stoning even by his neighbours when first he addressed them and told them of his conscious mission. Then, as his fame spread among the populace, the antagonism of the Church was roused, so that ultimately he was seized, handed over to the secular arm, and with every circumstance of ignominy tortured to death;—not merely in irrational fury by a mob, but after trial and sentence,—executed among outcasts as a criminal blasphemer, even his disciples fleeing from the danger-zone and denying any knowledge of him. Who could have imagined that a glorious and world-wide

influence was to be the outcome of such a life? It is not astounding that the Message survived so tragic an apparent end? Verily the weak things of this world confound the wise; for if such things happened now, would not those in authority say that they were too squalid, and beneath the dignity of the subject! Even the mighty works were said to be done with the aid of Beelzebub; the Sabbath and other tenets of the law were broken; the methods of public worship were interfered with; and he was even accused of being a gluttonous man and a wine-bibber, choosing his friends from among the lowest class of sinners. To such lengths will go the opposition to an unpopular new truth. Lies will be invented and believed. Hatred, malice and all uncharitableness will be employed to put it down; and although treble woe will fall upon the heads of those misguided zealots, they will be successful in their day and generation. The prophets will be stoned, the apostles imprisoned, the preachers of the truth

obstructed, hampered, and ridiculed, by both the religious and secular powers.

If a new truth survives all this, it thereby proves itself worthy. Were it easy of acceptance, it would not be new. Could it be finally suppressed and exterminated, it would not be true. These doings of unregenerate men are part of the Divine testimony: the dissimilarity between human and Divine methods is complete. Human thought is not revolutionised without a struggle; and the violence of the conflict is a measure of the thoroughness of the revolution.

Attitude of the Privileged

But it is clear that force should be used only by one side. Those who are the privileged messengers and forerunners must not retaliate. Passive resistance in the conflicts of men may be foolish and even wrong: for, when a wolf breaks into the sheep-fold, the shepherd is called upon for active service, not for supineness and passivity. But the

case is different when we are entrusted with a Divine message. Then we must be patient, long-suffering, not returning railing for railing, but with peaceableness and courtesy pursuing our appointed aim; exerting no force even to drive home conviction, speaking in parables when necessary, exercising wisdom and restraint in promulgating even what we know to be the truth, restraining the over-zealous: "he that believeth need not make haste." We can witness the contortions of adversaries without imitating them; and can leave the result in faith to the Higher Powers, whose servants and messengers we are.

That is the lesson. That should be our aim. Every now and then we may fail, but that is due to mere human fallibility. We need not strive nor cry, nor let our voice be heard in the street, in quietness and confidence shall be our strength, and we doubt not that the seed sown will blossom in His own good time.

CHAPTER IX

"TRANSCENDENTAL MAN"

The Problems of Genius and of Christology.

"I and the Father are One."

MYERS'S DOCTRINE OF THE SUBLIMINAL SELF has stood the test of time very well, and has received many confirmations, in the sense that a working hypothesis of that kind covers many difficulties, and paves the way for an explanation of many phenomena, including Genius, Telepathy, Clairvoyance, changes of Personality, and is suggestive of a variety or modification of the crude idea of Reincarnation; it also contributes to a better understanding of Control and Lucidity generally, including certain kinds of Prevision. Consequently it is well to use the hypothesis, and press it into

the service, even in cases where it had not originally been intended to apply.

The doctrine is roughly that we are, each of us, larger than we know; that each of us is only a partial incarnation of a larger self. The individual, as we know him, is an incomplete fraction; a portion only of the whole self is brought, at any one period, into intimate contact with matter and close association with a material body. The incarnate fraction varies in different individuals, from something almost insignificant, to something rather magnificent and striking; but in no case is the whole self manifested in any given individual.

A word here about pre-existence. The idea of pre-existence is often felt to be puzzling, but it need not be. Everything in a sense must have pre-existed, though not in its present collocation and form. We do not find things jumping in and out of existence; what we find is rearrangement, building up, or taking down. This planet had a beginning, in one sense, but it had previously been

something—a scatteredcollection of particles or a nebular gas. A rock pre-existed, in solution, or in the form of sand or lime. A tree pre-existed, on its material side, as molecules of air and water. Something has put the materials together into their present shape so that they have been individualised and received a name. Out of the nameless, things and persons have been formed. "Out of the everywhere into here."

So it is with an individual. The body is formed of terrestrial particles gradually collected and utilised as food. But the food does not determine the construction or the shape. That must be the work of the indwelling Spirit, the true Personality. It is so even with a plant or an animal: the mysterious thing we call its Life must have pre-existed in the germ handed down through countless ancestors. That germ was its material vehicle. But the potentiality enshrined in that germ clearly requires explanation.

The association of Spirit with Matter, the

incarnation of something pre-existent, is a reality, whether we understand it or not. Do not let us be diverted from facts by the incompleteness or presumptuousness of our theories. We see gradual incarnation, and the utilisation of Matter by Life or by Spirit going on all round us. We are conscious of the process in ourselves, if we attend. As Virgil says:—Mind animates Matter, and, permeating every part, blends with the majestic Whole.

During infancy the pre-existing unindividualised spirit—or whatever it ought to be called—only appears in minute proportions, the body being unfitted to receive any more. But the amount increases as bodily development proceeds, and in time reaches a climax; after which, in all probability, it begins to die back again (except of course in cases of sudden catastrophe). In that sense, normal birth and death are gradual processes. Incarnation may be said to begin even at the moment of conception, and to have proceeded a certain distance before birth. I take it

that the same thing might be said of the lower-grade life and incipient mentality manifested by animals; and that, on these lines, instincts, and youthful precocity generally, are capable of explanation, or at any rate of formulation. A chicken just hatched out of an egg, even in an incubator, can stand erect, can recognise a grain of corn, and can adapt its muscles to peck at it—a fact which seems to necessitate some kind of pre-existent or pre-natal experience. It is usually attributed quite vaguely to Heredity, but heredity itself needs much elucidation. So does the mechanism of race-memory.

As to heredity in general—although the idea of pre-natal choice, whether conscious or unconscious, carries with it many difficulties, yet somehow or other heredity has to be explained; and, on the psychic side, inheritance seems to me more likely to fit in with the doctrine of the Subliminal Self than with any merely materialistic conjunction of sperms and ova; although doubtless there are material concomitants, which can

be studied apart from any psychic theory, and although such concomitants must be necessary to explain the facts completely.

Choice

A partial explanation of the more psychic or spiritual facts of heredity, by the hypothesis of some kind of pre-natal Choice, may sound fantastic, even if the choice is usually automatic and unconscious. Yet even in the lower order of nature a germ provides the possibility; and such portion of animate existence as is appropriate seizes it and develops and constructs a suitable body, "to every seed his own body"—clothing a rubbish-heap with verdure, swarming into the myriad groupings of insect life—always pressing forward into animate existence, for some inscrutable reason.

But in higher beings the choice may occasionally be in some sense conscious :—

> Soul, that in some high world hast made
> Pre-natal unbewailing choice . . .

and again:

> When from that world ere death and birth
> He sought the long descending way.

Such was the beginning of Myers's tribute to a great Poet, of standard above the ordinary run of humanity; and it does not seem unlikely to contain or suggest an element of truth. For though it may often be by compulsion that we enter on an earthly career, yet sometimes it may be entered upon with foresight, through a desire to attain some good end, or to help struggling creatures or to contribute an element towards the progress of mankind. So it may be that spirits of higher grade than our own at times descend into generation, and show us the light of their countenance; incidentally thereby involving us in the responsibility of the dread alternatives, recognition and acceptance of their advent, or denial and rebuff.

As regards Reincarnation, it is probably a mistake to suppose that the same individual

whom we knew in bodily form is likely to appear again, at some future date. There may be exceptions, but as a rule that seems unlikely to happen. What may happen, however, is that some other portion of the larger self becomes incarnate; and if so it would be likely to feel a strong affinity, though often in a vague and puzzled way, with some other portion which had been embodied previously. And, again, if this second incarnate portion happened to include some part of what had gone to make the previous individual, then there might not only be a sense of affinity, but some kind of reminiscence, some memory of places and surroundings which had previously been familiar.

Many people have felt the odd sensation of having been at a place before, and of knowing instinctively what will be found round the corner or through a door. The experience has been called the *déjà vu*. It is difficult to explain, but the inclusion of some fraction of a former personality, with

overlapping fragments of memory from a previous existence, is a working hypothesis towards an explanation of a faculty which, in a few exceptional people, is fairly strong.

This idea seems to help us to contemplate the Platonic doctrine of Reminiscence as a possible reality in some cases—that the truths of geometry, for instance, were really known by each individual but forgotten; that "our birth was a sleep and a forgetting"; that the developed brain tends to inhibit the reproduction of ancient memories and to isolate us from our previous surroundings and our larger self. Indeed some such doctrine may be necessary to explain the aptitudes and powers and instincts, both of animals and of children, especially when those children show signs of exceptionally early precocity. When they can calculate, for instance, or play a musical instrument, without having learnt. The only alternative to reminiscence, in such cases, would appear to be some doctrine of direct Control by another intelligence. This, too, is a hypothesis

not to be overlooked, though some form of subliminal explanation seems simpler, if it is sufficient; which is doubtful.

How large a subliminal self may be, one does not know; but one can imagine that in some cases it is very large, so that it contains the potentiality for the incarnation not only of a succession of ordinary individuals, but of really great men. It would be a mistake to suppose that Dante and Tennyson were reincarnations of Virgil, but one might, though presumptuously, imagine that all three were incarnations of one great Subliminal Self, which was able to manifest itself in different portions, having a certain family likeness, though without any necessary bodily consanguinity or inheritance in the ordinary sense.

The heredity link appears to be of a quite different order from the subliminal link; and mother and son need have no spiritual or subliminal relationship, in spite of their great similarity. The similarity of the bodily instrument would be sufficient, in that case,

to account for the similarity of that portion of the son's larger self which automatically selected this means of manifestation. And the importance of parenthood, in providing a suitable corporeal instrument or vehicle for the manifestation of a really great personality, can hardly be overestimated. But the indwelling spirit need not come from the parents at all. It can be drawn, as it were, from some independent source, by the perfection or other quality of the material vehicle provided.

In some cases it may happen that the portion incarnate is so great that the embodied personality exhibits the phenomenon of transcendent Genius, and is by universal consent accounted "a great man." Though there are cases in which exceptional powers are manifested by one who is not a great man in any ordinary sense, but who has channels of inspiration open occasionally to a non-incarnate portion of his larger self. In such cases the normal incarnate portion, apart from the exceptional periods, may be of ordinary magnitude, or, in the ordinary

affairs of life, may even be foolish or commonplace. Occasional access to higher sources of information or inspiration is not to be denied to personalities of mediocre grade. The normal portion of such individuals is small, the subliminal portion large by comparison, and occasionally accessible.

Exceptional Incarnations

Not only, moreover, can there be different degress or proportions of incarnation developed from any ordinary subliminal self, but there may be many grades among those selves; so that, if ever an infinitely large and comprehensive Self allowed any portion to take human form and associate itself with Matter, that portion would recognise itself, and be gradually recognised by others, as in close touch with the Infinite and the Eternal. And humanity would perceive that something far above their own grade, something beyond any previous experience, had dwelt among them, and by origin and personality was essentially

Divine. It may be that only through such an incarnation as that could we get any knowledge or perception of that higher, but otherwise inaccessible, Being.

Deity, indeed, is not a thing which we mortals can conceive. We can formulate certain attributes, and try to grasp them, but Infinity is beyond our grasp. All that we can apprehend during our sojourn in matter, and probably for long afterwards, is something in human form, something anthropomorphic. And though we may have qualms at suggesting that any spirit inhabiting a material body of human shape can be anything more than man, yet if the doctrine of the subliminal self be true, and if a Self of Divine magnitude, if in fact Deity, allowed Itself or some portion of Itself to become Incarnate—humanity would recognise the Kinship and the Identity, and would realise that in this exceptional Manifestation there was as much as it was able to grasp of the Infinite Existence, and would be right in speaking of such an Individual as the Son of God.

But the incarnate Son would know that the Father was greater than he. He would feel his kinship, and realise the majesty of his origin, and his innate superiority to all the sons of men ; yet he would know himself also to be a perfect human being, a Son of Man as well as a Son of God, uniting the two natures in the only way possible, and raising the standard of mankind to heights otherwise inaccessible.

It is *our* privilege to learn that we are sons of God. *He* had to learn that he had truly become a Son of Man. That was the fact to be grasped and emphasised.

What other than this can be meant by a Divine Incarnation ? It is manifest that the flesh is a limitation, a restriction, involving essentially an element of finiteness. It is marvellous that any element of Deity can take human form and be subject to the disabilities of a human body. His kinship with the Father went without saying. There was no difficulty about that relationship : his Spirit was truly and absolutely Divine.

His own statement is clarity itself. "I came forth from the Father and am come into the world. Again I leave the world and go unto the Father."

The idea of quantity is unimportant: the feature to be recognised is quality. A son is of like nature with his father, or of the same nature as his father: he need not be of equal magnitude, and he is certainly not identical; but—if the analogy is to hold, in the partial way that is alone possible to any analogy—the spirit of the son and the spirit of the father are the same. The fragment transmitted may be minute, as indeed in ordinary parenthood it certainly is, but the quality may be the same, down to even minute detail. Spiritually and essentially "I and the Father are one." God, who at sundry times and in divers manners spake in time past unto the fathers by the prophets, hath in these last days spoken unto us by His Son.

The object of the Incarnation was not to overpower us by a blinding demonstration,

but to exhibit attributes of the Godhead in a form accessible to the childlike and the simple—attributes of which we otherwise might have remained ignorant—truly human attributes, though raised to a perfection unfamiliar and surprising, yet attractive and intelligible. The qualities displayed were those of love and sympathy and fellow-feeling, an unexpected kinship of nature. A true revelation! So that it could be said: "The words which I speak unto you, I speak not of myself, but the Father that dwelleth in me, He doeth the works." "As the Father gave me commandment, even so I do." "He that hath seen me hath seen the Father." "I and the Father are one." Yet "the Father is greater than I."

No one can suppose that the Ruler of the universe, the Maker of Heaven and earth and of all things visible and invisible—no one who has formed any conception of the infinite depths of space, and the thousands and millions of worlds which it contains—no one who has saturated himself with the

intricacies and beauties and incomprehensible magnitude of Creation, can suppose that the Regulator of all this could be incarnate in Totality in the matter of any single planet, and could there be subject to the browbeatings and revilings of men, and be put to death. An absurdity of that kind is not what we are called upon to believe. Such an idea would be a heresy, easily confuted from the New Testament. One need go no further than the Gospel of John in dealing with any half-educated believer, or anyone who regarded that Gospel as authoritative, and yet sought to inflict on himself and others so monstrous an idea. It is as absurd as a literal interpretation of the astronomical body "the Sun" would be when an invalid was told to go and sit in it.

The efforts made to evade such a travesty of the Incarnation, and yet to admit the truth of the central doctrine of Christianity, "*Emmanuel, God with us,*" have led to numerous heresies, now seen to be unnecessary. It was difficult to realise how the

Divine Nature could in any real sense enter and inhabit a human body, unless that body were of an exceptional and essentially non-human nature; so they tried to conceive it as an appearance or simulacrum, in the likeness of humanity, but coming and departing and living under non-human conditions. The Docetists and the Apollinarists sought what they regarded as reverent ways out of the difficulty; but the instinct of the Church rebelled against them, and the mystery remained.

Mystery indeed there is, and presumably always will be. There is mystery even in the familiar connection between Mind and Matter, between the human spirit and the body which it constructs and utilises, and in the way that one reacts upon the other. But it is a mystery we feel able to face; it is one that we have got accustomed to; and Christians, taught by their Founder, have grown familiar with the idea of the indwelling in humanity of the Holy Spirit.

So, if we face the doctrine of a subliminal

larger self belonging to each of us, and realise that we are each of us only a portion of that greater personality, then those who are able to attribute Personality to the Deity ought to have no insuperable difficulty in realising that here is a close analogy with the Divine Incarnation; save that the Larger Self in that case, of which a portion became incarnate, was Pre-eminent, Supernal, and Divine. The Christian belief thus becomes as it were rational. The opposition of the so-called Rationalists may in time melt away, as they become better acquainted with facts; and the worthier and more notable efforts of the Modernists may be felt to be—as indeed they doubtless are now—gropings in the direction of the truth.

Parabolic Illustration

The meaning of the above theory can be expressed in parabolic form by reference to the Solar System and the terrestrial aspect of the sun.

The sun itself is an amazing Furnace, far hotter than any furnace that ever existed on the earth, its temperature being twice as high as the highest known earthly temperature, namely, the electric furnace. It showers its energy in all directions equally, and its rays penetrate the depths of space. In size it is a million times bigger than the earth; and it dominates and vivifies, as well as illuminates, the solar system. All our energy comes thence, and in a sense it is the supreme existence in the whole solar system—the only part of it which could be perceived from a stellar distance. The sun would appear as a star among the others, and not a planet would be visible. All the rest of the solar system is derived, and subordinate, and dark, and comparatively insignificant. The sun alone is self-luminous and dominant.

But all of the sun that we are able and fitted to receive, and utilise, and live with, comes to us as the sunshine. This it is which serves all human needs; and even this unveiled is too bright for mortal sight.

Filtered by the earth's atmosphere, however, and so adapted to the earth's conditions, it is not destructive at all, but is vivifying and pleasant and comforting and homely. Yet it is of the same nature as the sun. It is, in fact, the sun as we know it. It is precisely adapted to human needs, and the requirements of animals and plants. It interacts with the earth, but is not of it; it is essentially solar, not terrestrial. It has brought into existence all that is living on the planet. In a sense it may be said that by it everything is made that was made. Without it neither a plant nor an animal could exist. Winds and rain and rivers and all the powers and beauty of Nature derive their origin and activity from the solar beams. The fires that we light on our hearths are but the historical remnants of past sunshine. We can liberate its stored energy when and how we will, and, although we may not remember whence it comes, man and animals can warm themselves at its secondary glow.

The sun itself is so vivid, intense, and

magnificent, that if we approached it in its unveiled majesty, not only we, but everything in the world would be burnt up and dissipated in vapour, or rather disintegrated into its constituent atoms. ("No man can see my face and live.") But the sunshine—which after all is the sun as we know it, and which brings with it a revelation of the nature of its source—not by way of explicit information or instruction, but by immanent and intrinsic similarity, so close as to be practically identity—this, which is the human, the earthly aspect of the sun, is, as it were, moulded and adapted to our nature, and, though but a minute fraction of the whole, reveals to us all that we know of the sun, and is identical with it, and often goes by the same name. Animals can be said to bask in the sun; and we can travel towards the sun; that is towards regions where the sun is strong, so strong that we may be in danger of sunstroke unless we take adequate shelter. We cannot always be immersed in it. We have to get into the shade to do

our daily work. We are mercifully screened from it at times. We cannot always contemplate it. But yet it is there for our brighter moments; and at times of sunrise and sunset we can become conscious of the ineffable beauty of its earthly manifestation. The earth's atmosphere screens us from its full brilliance, which would be too much for us. Only a portion of it is allowed to reach us, but that which does reach us subserves all our needs.

The sunshine is not by any means all that radiates from the central orb. We have become aware of its gravitational field also, and there may be many other forms of energy, electrical and other, through the constant outpouring of which the whole system is regulated and controlled in a beautiful scheme of law and order.

So also with the indwelling Spirit of the eternal Christ. As we look back through the vista of 1900 years, we can all, at the summons of Pilate, behold the Man; but in that tortured and pathetic figure how few

can penetrate beneath the surface and discern the indwelling Spirit. Only the pure in heart can effectively see God.

The full revelation of the Logos from the Beginning may not be clear to us even now, but our faith tells us that by a supreme Incarnation there was revealed the true Light which lighteth every man that cometh into the world. The Word was truly made flesh and dwelt among us, and, in moments of insight, we have beheld his glory, the glory as of the only begotten of the Father, full of grace and truth.

PUBLIC
LIBRARIES